## Virginia Marine Resources Commission

# Permit Compliance and Inspection Program



Final Report CZM Grant NA270Z0312-01 Task 9

December 1993



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#### Introduction

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The Virginia Marine Resources Commission ("Commission" or "VMRC"), as provided in Chapter 12 of Title 28.2 of the Code of Virginia, is the State agency responsible for issuing permits for encroachments in, on, or over State-owned submerged lands throughout the Commonwealth. The Commission has possessed this regulatory authority since 1962, and currently processes approximately 2,000 applications, and issues nearly 500 permits annually. Virginia is only one of six "low water states" and maintains ownership of all submerged lands channelward of the mean low water mark in tidal waters, and regulatory authority channelward of the ordinary high water mark on most naturally occurring nontidal perennial streams.

In addition to managing the Commonwealth's 1,472,000 acres of submerged lands, the Commission also regulates the use or development of tidal wetlands and coastal primary sand dunes pursuant to the provisions of Chapters 13 and 14 of Title 28.2 of the Code of Virginia. Local governments are provided the option to adopt and locally administer a model ordinance. Thirty-five localities have elected to do so. VMRC maintains original jurisdiction in the remaining eleven "Tidewater" localities which have not adopted the model wetlands and dunes ordinances. Even if locally adopted and implemented, the Commission retains certain oversight responsibilities and reviews all decisions made by those local wetlands boards.

The regulatory activities conducted by the Commission and the 35 local wetlands boards are integral core components of Virginia's approved Coastal Zone Management Program. The permit review processes used by the Commission and these local wetlands boards ensures that necessary economic development is permitted in a manner which minimizes adverse impacts to the valuable natural resources within our coastal zone.

Permit compliance is a mandatory component of any effective regulatory program. As such, it is essential that the terms and conditions contained in the permit documents be followed if, the full benefits of any regulatory program are to be realized. Without such permit compliance, the regulatory process breaks down and serves only to increase bureaucracy.

In order to evaluate compliance with permits issued by VMRC and local wetlands boards a survey, funded in part by CRMP grant #NA90AA-H-CZ96, was conducted in 1991 (Exhibit A). The compliance survey was designed to investigate and gauge the effectiveness of the various compliance monitoring programs currently utilized by VMRC and local wetlands boards. The survey was intended to both identify existing compliance shortcomings and to ascertain effective compliance monitoring techniques in order to develop concise recommendations to enhance compliance monitoring programs.

The purpose of the grant project was to implement the recommendations of the 1991 Permit Compliance and Inspection Program report and institute a standardized permit compliance program for permits issued by the Commission in the Coastal Zone,

and assess permit compliance for projects authorized in 1990 and 1991. The latter was designed as a follow up to the compliance inspections conducted during the 1991 study for projects permitted in 1989.

This document is intended to serve as the final report for Task 9 of Grant No. NA270Z0312-1 and provides an overview of the steps taken to initiate the compliance monitoring program and a review of the compliance data gathered during the grant year.

#### Permit Compliance Program

In the December 1991 Habitat Management Division - Special Report (Exhibit A), five recommendations were made for VMRC to enhance permit compliance efforts.

- 1. Require detailed drawings for all projects requiring a VMRC permit.
- 2. Require accurate benchmarks or reference points on the plan view drawing(s).
- 3. Require Engineers to take an adequate number of slides during the initial site visit to illustrate pre-construction conditions.
- 4. Require Engineers to conduct post-construction inspections at all sites permitted by VMRC.
- 5. Incorporate the data collected from the post-construction inspections into the Habitat Management Divisions existing computer data base.

These recommendations were incorporated into the Commissions compliance monitoring program through several mechanisms. The Joint Permit Application (Exhibit B) was amended to reflect the need for more detailed drawings with accurate benchmarks. New conditions were incorporated into Commission permits requiring that a permit placard (Exhibit C) be posted at the project site and procedures were established for the Commission to receive notice when project construction is started. The latter was accomplished through the use of a self-addressed stamped card (Exhibit D) which is returned to the Commission, by the permittee. Special conditions related to permit compliance have been added to all permits issued by VMRC. Examples of these can be found in the attached sample permit (Exhibit E).

In addition, an interim compliance data base was established to track compliance monitoring efforts and results. While this data base is currently separate from the Habitat Management Division's permit tracking system, the Division has contracted with the Virginia Institute of Marine Science to update and modify our computerized permit tracking system. The new system will enable us to incorporate compliance data into each permit file. The initial software for this change has been delivered to VMRC and it is anticipated that the new system will be available for use in mid-1994.

Furthermore, procedures have currently been established within the Habitat Management Division to require that the Division's Environmental Engineers inspect all permitted projects. These procedures require that photos be taken of the site both before and after construction, and that the final inspection be documented through use of a Project Compliance Assessment Report (Exhibit F).

#### Permit Compliance Surveys

In addition to implementing the above recommendations, a representative sample of new data from those projects which were permitted in 1990 and 1991 was added to the 1989 data. This was designed to provide up to date information for continued comparison of the compliance checks.

One hundred and fifty projects were randomly selected from applications processed for permits in 1990 and 1991. Applications not involving a permit, or involving a private pier, or subaqueous dredging were excluded. This resulted in 131 applications being selected for 1990 and 136 for 1991. These figures were determined to be adequate to represent compliance rates for all permits issued during a given year. Because permit activity in a given area or locality over a particular year is variable, no effort was made to ensure that all localities were represented. Instead, it was anticipated that the random sample would result in a sample group which more accurately reflected the average permit activity per locality.

Table (1) indicates the number of projects reviewed in each locality. Thirty-three Tidewater localities are represented over the three year period. Two hundred and fifty-seven of the projects required wetland permits, sixty subaqueous permits, and sixty-nine required both jurisdictional permits. This represents a review of a total of three hundred and eighty-seven permits.

Follow-up site inspections were made of all the selected projects to determine the degree of compliance. Results of the compliance inspections were grouped into the same five categories as the 1989 sample:

- 1. Project not constructed
- 2. Unable to determine compliance
- 3. In compliance with the permit document
- 4. Moderately in compliance (the average additional

encroachment did not exceed 6 inches greater than the permitted alignment, and had length and square foot measurements which were no more than 10% greater than that authorized.

5. Out of compliance -

(the average additional encroachment exceeded 6 inches and the measurements were greater than 10% authorized.)

 $\frac{\text{Table 1}}{\text{Number and jurisdictional type of project selected for the compliance survey in each locality.}$ 

Locality	Rural/Urban	Project #	Project Type
		Year	
		89 90 91	
Accomack	Rural	15 11 5	58,21W,5B
Charles City	Rural	0 2 1	18,1W,1B
Chesapeake	Urban	4 5 3	2S,10W,0B
Chesterfield	Rural	0 1 0	0S,0W,1B
Essex	Rural	1 4 3	4S,2W,1B
Fairfax	Urban	1 1 1	1S,2W,0B
Gloucester	Rural	3 6 8	1S,12W,4B
Hampton	Urban	5 3 8	58,11W,0B
Hanover	Rural	0 1 0	1S,0W,0B
Islc of Wight	Rural	0 0 2	2S,0W,0B
James City	Urban	3 3 1	0s,7W,0B
King and Queen	Rural	1 0 3	1S,2W,1B
King George	Rural	1 2 2	2S,3W,0B
King William	Rural	1 1 1	0S,1W,2B
Lancaster	Rurai	9 15 9	3S,26W,4B
Mathews	Rural	3 3 9	0S,10W,5B
Middlesex	Rural	8 7 10	3S,17W,5B
New Kent	Rural	0 1 0	1S,0W,0B
Newport News	Urban	0 4 5	3S,4W,2B
Norfolk	Urban	8 8 7	5S,15W,3B
Northampton	Rural	1 3 1	1S,4W,0B
Northumberland	Rurai	19 14 8	1S,37W,3B
Poquoson	Urban	1 2 4	1S,6W,0B
Portsmouth	Urban	0 0 5	18,2W,1B
Prince William	Urban	1 1 0	0S,1W,1B
Richmond Co	Rural	0 1 3	28,0W,2W
Stafford	Urban	3 4 3	2S,4W,5B
Suffolk	Rural	1 0 1	0S,1W,1B
Surry	Rural	0 0 1	1S,0W,0B
Virginia Beach	Urban	20 22 15	8S,38W,13B
West Point	Rural	0 0 1	18,0W,0B
Westmoreland	Rural	7 5 14	1S,4W,3B
York	Urban	4 1 2	18,5W,1B
Totals			
33 Localities	21 Rural	120 Projects (89)	60 Sub.
S=Subaqueous W=Wetlands B=Both Subaqeous and Wetlands	12 Urban	131 Projects (90)	257 Wet.
		136 Projects (91)	69 Both

The results of the sampling have been summarized and may be found in Table 2. As with the 1989 study, the results were subdivided into rural and urban areas, in an attempt to evaluate any demographic differences in compliance levels. Rural areas were defined as those areas possessing population densities of less than 140 per square mile; while urban localities were defined as having population densities greater than 140 per square mile (1980 census). This breakdown was the same for the 1991 grant study and for purposes of consistency was maintained.

Table 2
Percentages of constructed projects categorized by their level of compliance.

		1989			1990		1	991	
	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
# of Projects Reviewed	120	50	70	131	54	77	136	54	82
% of Projects Reviewed		42%	58%		41 %	59%		40%	60%
# of Projects Constructed	98	43	55	109	45	64	113	40	73
% of Projects Reviewed	82 %	86%	79%	83 %	83%	83%	83 %	74%	89%
# in Compliance	50	26	24	51	26	25	54	19	35
% of Projects Constructed	51%	60%	44%	47%	58%	39%	48%	48%	48%
# in Moderate Compliance	14	6	8	21	10	11	23	14	9
% of Projects Constructed	14%	14%	14%	19%	22%	17%	20%	35%	12%
# Out of Compliance	8	2	6	4	1	3	7	0	7
% of Projects Constructed	8%	5%	11%	4 %	2%	5%	6%	0%	10%
# Compliance Indeterminable	26	9	17	33	8	25	29	7	22
% of Projects Constructed	27 %	21 %	31 %	30%	18%	39%	26%	18%	30%

For the most part the same trends observed in the 1989 study are reflected in the figures for 1990 and 1991. Since these figures represent projects that were permitted prior to the publication of the recommendations from the 1991 study, it is not unexpected that there should be little change. However, it is encouraging to see that there were no projects out of compliance in urban areas for 1991.

In addition to the inspections conducted on projects permitted in 1990 and 1991, inspections were also performed on projects permitted by VMRC during the grant year following implementation of the standardized compliance program described above. To date 36 projects have been inspected and of those, 64% have been found to be in compliance. Only one project was found to be out of compliance and five projects were within the moderate compliance category. Figure 1 depicts the number of permits checked, in the latest effort, and a breakdown of the number of projects constructed and their degree of compliance.

## VMRC Permit Compliance

## Inspections

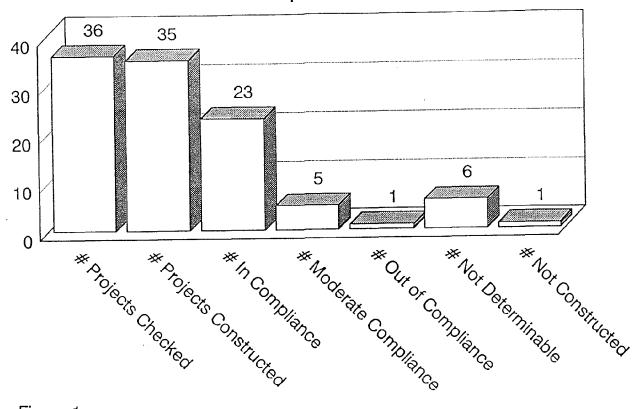


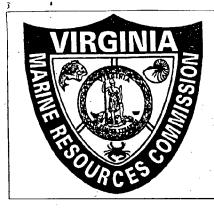
Figure 1

#### Conclusion

At this point, the implementation of a standardized compliance monitoring program for projects permitted by VMRC appears relatively successful. It may be too early, however, to see if any substantial changes will need to be made to improve the program which remains funded for the next grant year. On a positive note the Habitat Management Division has purchased a boat with general funds to inspect dredging projects for which compliance could not previously be monitored.

For projects permitted by local wetlands boards, it appears more compliance data will need to be gathered before we can finalize recommendations that would direct our efforts towards specific areas or project types. On the other hand, it does appear that certain urban localities have developed adequate procedures, or have provided sufficient staff resources to ensure compliance with their permits. Furthermore, even if a local government had incorporated the 1991 report recommendations in their entirety into their procedures, it is likely that any results would just now begin to be seen. As a result, continued monitoring for compliance of local wetlands board permits appears necessary, and a standardized compliance monitoring program for wetland permits may need to be initiated.

EXHIBIT A



Habitat Management Division - Special Report December 1991

## Permit Compliance and Inspection Program: Findings and Guidance Document

Robert C. Neikirk

#### INTRODUCTION

The Virginia Marine Resources Commission ("the Commission" or "VMRC"), in conformance with Section 62.1-3 of the Code of Virginia, is the State agency responsible for issuing permits for encroachments in, on, or over State-owned submerged lands throughout the Commonwealth. The Commission has possessed this regulatory authority since 1962. We currently process over 2,000 applications and issue nearly 500 permits annually. Virginia is a "low water state" and assumes jurisdiction of submerged lands channelward of the mean low water mark in tidal waters, and has regulatory authority channelward of the ordinary high water mark on most naturally occurring nontidal perennial streams.

In addition to managing the Commonwealth's submerged lands, the Commission also regulates certain activities in tidal wetlands and coastal primary sand dunes pursuant to Chapters 2.1 and 2.2 of Title 62.1 of the Code of Virginia. Local governments have the option to adopt and administer the ordinance. VMRC asserts original jurisdiction in those Tidewater localities which have not assumed local regulation through the adoption of the model wetlands and dunes ordinances. Even where locally adopted and implemented, the Commission retains oversight responsibilities for all decisions made by those local wetlands boards.

The regulatory activities conducted by the Commission and the 34 local wetlands boards are integral core components of Virginia's approved Coastal Zone Management Program. The permit review processes used by the Commission and these local wetlands boards ensures that necessary economic development is permitted in a manner which

minimizes adverse impacts to the valuable natural resources within our coastal zone.

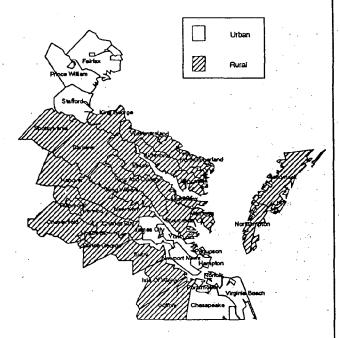
Permit compliance is a mandatory component of any effective regulatory program. As such, it is essential that the terms and conditions contained in those permit documents be followed if we are to realize the full benefits of the regulatory program. Without such permit compliance, the regulatory process breaks down and serves only to increase bureaucracy.

In July 1990, Senate Bill 183 became law (Ch. 881 Acts of Assembly 1990). This legislation provided the Commission and local wetlands boards with the authority to issue restoration orders and assess civil charges for violations of the applicable subaqueous, wetlands and sand dune statutes. An ability to accurately determine and monitor compliance with permit requirements is essential if the agency and wetlands boards are to effectively carry out the intent of this legislation.

Unfortunately, Commission staff does not currently have a standardized procedure for monitoring permit compliance. Instead, the staff engineer assigned responsibility for a particular locality will attempt to inspect projects which are under construction or have been recently completed. Quite often such compliance inspections are in response to the receipt of an inquiry or complaint. Additionally, the Commission's marine law enforcement personnel are often aware of permitted projects in their localities and occasionally make site inspections during the performance of their daily duties. In either case, however, only a small percentage of the projects permitted by VMRC are routinely inspected for compliance.

Permits issued by wetlands boards are also not always carefully reviewed for compliance upon project completion. Independent studies conducted by Bradshaw (1990), Hershner et al. (1985) and a survey conducted in conjunction with this project indicate that the extent of permit compliance monitoring by local wetlands boards varies between localities. That effort

Figure 1. Tidewater Virginia



overall effectiveness of permit compliance within the coastal zone, no effort was made to ensure that all localities were represented in the survey. Instead, it was anticipated that the random sample would result in a sample group which more accurately reflected the average permit activity per locality. Therefore, the number of projects reviewed in each locality varies according to the observed permit activity in 1989.

Twenty-three (23) of the 49 Tidewater localities were represented in the sample group. Figure 1 and Table 1 illustrate the Tidewater region and indicate the number of projects reviewed in each locality. Eighty-one (81) of the selected projects required only a wetlands permit, 13 required only a subaqueous permit and 26 impacted both jurisdictions and required subaqueous as well as wetlands permits.

Site inspections were made of all the 120 selected projects to determine the degree of compliance. Results of the compliance inspections were grouped into five categories:

- 1. Project not constructed
- 2. Unable to determine compliance
- 3. In compliance with the permit document
- 4. Moderately in compliance with the permit document.
- 5. Out of compliance with the permit document

Categories 1, 2 and 3 were fairly straightforward and easy to assess. The distinction between those projects considered to be in moderate compliance or out of compliance was more difficult to make and became somewhat subjective. As a rule, however, those projects considered to be moderately in compliance possessed an average additional encroachment which did not exceed 6 inches greater than the permitted alignment, and had length and square foot measurements which were no more than 10% greater than that authorized. Those projects exceeding either of the above thresholds were considered to be out of compliance.

As previously mentioned dredging projects were not included in the survey. These projects were excluded because we believed that it would be difficult to distinguish between man-made and natural post-dredging deviations in depth contours. However, recommendations to monitor compliance for dredging projects are included in the Recommendations section of this document.

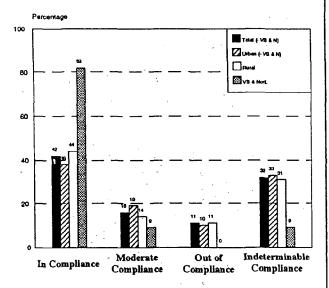
#### Results

The results of the survey are summarized in Table 2. You will note that the survey results were subdivided into rural and urban categories. This was done in an effort to ascertain if there were any demographic differences in compliance levels. For the purpose of this study, rural localities were defined as those having population densities of less than 140 per square mile; urban localities were defined as having population densities greater than 140 per square mile. The figures for population density were obtained from the 1980 census by the U. S. Department of Commerce (Univ. of Virginia, 1987). This breakdown was also patterned after that used by Bradshaw (1990) in her compliance monitoring study.

In addition to providing the raw numbers for the projects determined to be in a particular category, Table 2 also provides the percentage of constructed projects which were categorized by their level of compliance. These percentages are particularly interesting when evaluating the results. Especially noteworthy are the percentages of projects in which compliance could not be determined. Figure 2 further illustrates this information.

Figure 3.

Projects categorized by level of compliance. Va. Beach and Norfolk factored independently.



#### Discussion

A cursory review of the survey results is at first very discouraging. Of all the constructed projects reviewed, only 51% were determined to be in compliance. It is important to note, however, that compliance could not be determined for one reason or another at 27% of the sites visited. The fact that compliance could not be determined does not automatically mean that the projects were not built in conformance with the intent of the permit document

In fact, it is more encouraging to note that the vast majority of the sites visited even where compliance could not be determined, appeared to have been constructed along reasonable alignments and were often the proper length or width or both. This seems to indicate a general intent to comply with permit requirements. This opinion is further supported by the fact that, of all those projects where compliance could be determined, 89% were determined to be in either total or moderate compliance.

The primary problem identified during the survey was the inability to precisely determine compliance at 27% of the sites visited. Many of the permits did not have adequate drawings or benchmarks to ensure compliance. Additionally, many permits contained ambiguous conditions such as, "approximately" or "as close to the bank as possible", which are by their nature virtually unenforce-

able. Compliance determinations are made more difficult when the person inspecting the constructed project was not present during the initial site visit and is therefore unfamiliar with preconstruction conditions. Without the aid of precise benchmarks or other means to pinpoint the alignment of a project, compliance determinations are difficult at best and frequently impossible.

As expected, the projects in localities that require more detailed application drawings and information exhibited a higher percentage of determinable compliance. This is illustrated in Figure 3. Compliance could be determined at 91% of the sites inspected in Virginia Beach and Norfolk. Both of these localities require detailed permit drawings with identifiable benchmarks. Both also regularly conduct post-construction compliance inspections. Additionally, Virginia Beach requires professionally engineered project drawings and further requires the permittees to post performance bonds. Those bonds are not released until post-construction inspections have determined that projects are indeed in compliance with the permit granted by the Board.

Not only was compliance usually determinable at the Virginia Beach and Norfolk projects, but the level of compliance was generally higher as well. This is most likely attributed to the regular post-construction inspections. Ninety (90) percent of the projects where compliance could be determined in Virginia Beach and Norfolk were determined to be in compliance and 10% were in moderate compliance. None of the inspected sites were determined to be out of compliance. By comparison, 15% of the sites visited in other localities, were categorized as out of compliance, where compliance could be determined.

Prior to conducting the study, it was anticipated that there would be a marked difference in compliance levels between urban and rural localities. Initially this appeared to be the case. Once Virginia Beach and Norfolk were factored independently from the other urban localities, however, the data revealed very little difference in compliance levels between urban and rural localities.

It appears that the programs being implemented by Virginia Beach and Norfolk are effective in ensuring permit compliance. As a result, the recommendations for improving compliance draw heavily on the examples provided by these localities.

#### SUMMARY AND RECOMMENDATIONS

The increasing importance of effective compliance monitoring cannot be overstated. Recent legislative changes which authorize VMRC and wetland boards to issue restoration orders and assess civil charges for violations of wetlands, dunes, and subaqueous statutes necessitate compliance programs which can accurately

to the one developed by VMRC. This form may be found as Attachment 2. The worksheet will help to ensure that all the necessary information is gathered during the inspection and will provide a quick reference in the event questions regarding the project arise later. Additionally, the worksheet information should be provided to VMRC for incorporation into the compliance data base. The data base will provide a valuable source of information on compliance and the overall effectiveness of individual wetlands boards.

- 5. Utilize only enforceable permit conditions and avoid nebulous statements such as "approximately" and "as close to the bank as possible." Instead, the board should negotiate a specific maximum encroachment, length, or amount of impacts should modifications become necessary to satisfy any concerns. If modifications or revisions are agreed to during the public hearing, revised drawings which accurately reflect the modification, including revised benchmark distances, should be required prior to permit issuance.
- 6. Develop a wetland board placard to be posted by the permittee at all permitted project sites during construction. The placard can serve to aid inspectors and concerned citizens when a project is under construction and problems or questions arise. The placard would provide the name and permit number, making identification and inspection of the project easier. If the locality already requires building permits for all wetland projects, they may wish to avoid duplication and just add the wetland permit number to the placard for easy identification. A sample placard that was developed for VMRC is provided as Attachment 3.
- 7. Performance bonds can be utilized to provide a financial incentive to comply with wetlands permits. Some boards currently require all permittees to post a performance bond. That bond is not released until a post-construction inspection has determined that the project was constructed in conformance with the permit document. Some boards may determine that bonds are not appropriate for all projects due to low permit activity or the fact that additional man-hours are required to process the bonds.

Bonds are a compliance mechanism that are already provided for in the wetlands law. They are routinely used effectively by a few boards to ensure compliance. The bonds are typically set high enough to provide sufficient funds to undertake restoration in the event of noncompliance. Bonds also

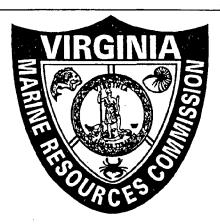
provide an additional mechanism for ascertaining when the permitted construction has been completed, since the permittee will typically call for a compliance inspection soon thereafter in order to have his bond released. Whether or not the board develops a performance bond policy for all projects, performance bonds should be considered as a valuable tool to ensure compliance on projects of special concern.

## Recommendations VMRC Should Consider to Enhance Compliance Efforts

Virginia state agencies are also currently operating within strict fiscal constraints. In addition, all agencies continue to explore ways to streamline the permitting process. As a result, it is especially important that any new compliance enhancement policies not result in additional burdens on VMRC's financial resources nor result in unnecessary additional requirements imposed on the applicant. The following recommendations are made with this in mind and are typically policy and procedural type changes rather than an imposition of new requirements on the applicant. Many of the recommendations for VMRC are similar to those noted for wetlands boards.

- 1. Require detailed drawings for all projects requiring a VMRC permit. Staff engineers should utilize the drawings checklist found in the Joint Permit Application in their initial review of each application to determine completeness. Areas where insufficient data was provided should be conveyed to the applicant with the acknowledgement letter. Incomplete applications should not be processed. If adherence to this policy fails to provide the anticipated results, the Commission may wish to consider adopting a regulation that requires professionally engineered drawings be submitted on all commercial projects, or for projects exceeding a certain threshold of impact or value. In the event an engineer can clearly determine from the available information that a VMRC permit will not be required, additional information to satisfy this policy would not be necessary.
- 2. Accurate benchmarks or reference points should be required on the plan view drawing(s) of all projects requiring VMRC authorization. Accurate distances from the benchmark to each end, and angle of the structure or impacted area should be mandatory. These distances should be routinely checked during the initial site visit. If benchmarks are impractical for a certain project, it may be necessary to have the applicant stake the impacted area. If staking is utilized, the engineer should take an adequate number of slides to accurately document the proposed alignment. This may well be the case for dredging proposals.

Attachment 1 Vicinity Map Site Map Lot 10 25' Lot 11 Lot 12 Datum: MLW Plan View County of: Northumberland Adjacent Property Owners 1. Lot 10, C.B. Parks Sheet 1 of 1 John G. Doe 2. Lot 12, M.E. Lank Date: August 3, 1991 P.O. Box 123 Tidewater, Va 22222



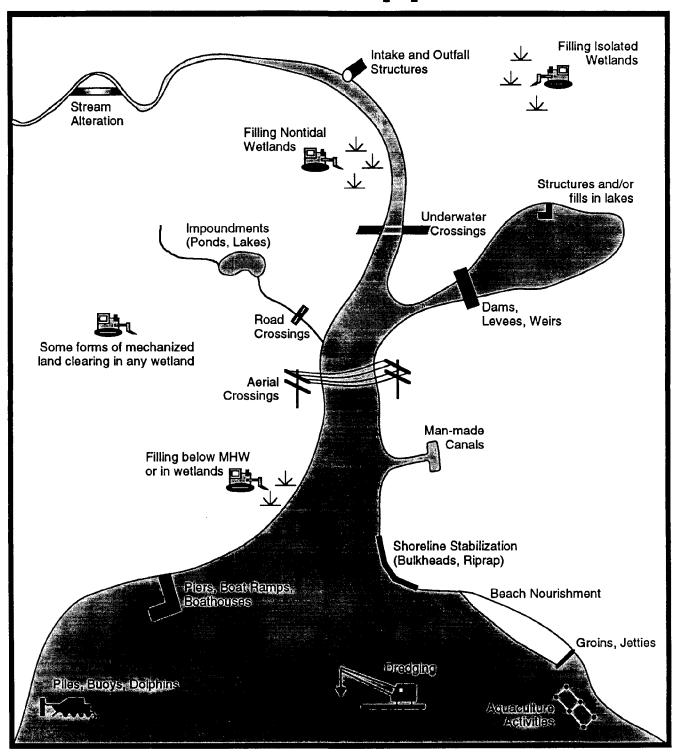
Permit #

### Commonwealth of Virginia Marine Resources Commission Authorization

	(Name)	
	(Address)	
ne Permit Authorizes:		
Issuance Date	Expiration Date	<u>·</u> •
	·	
	(Commissioner or Designee)	
		-
	(Notary Public)	
· ·	(Commission Expires)	

EXHIBIT B

## Local, State, Federal Joint Permit Application



Published jointly by the:

U.S. Army Corps of Engineers, Norfolk District Virginia Marine Resources Commission

Virginia Dept of Environmental Quality Local Wetlands Boards

#### PREFACE

This guide is designed to assist you in applying for permits from Local, State, and Federal regulatory agencies for work in waters and/or wetlands within the Commonwealth of Virginia. The intent of the guide is to provide general information on the permit process, not a complete legal and technical reference.

Answers to technical questions and detailed information about specific aspects of the various permit programs may be obtained from any of the Federal and State regulatory offices or the advisory agencies listed in the agency directory.

#### THE JOINT PERMIT APPLICATION PROCESS

Complete one application to apply for multiple agency permits - A single Joint Permit Application is used by the regulatory agencies. This means only one application needs to be completed for most local, state, and federal agency permits. However, some health departments and local agencies do not use this application. You should contact them for information regarding their requirements. Even though one application has been filed, separate permits are often required from the regulatory agencies involved in the permit program. Before you begin work, make sure you have received authorizations or waivers from each agency.

Send completed application to the Virginia Marine Resources Commission. They will assign a processing number and forward copies to the Corps of Engineers, Department of Environmental Quality, local wetlands board, and various other State agencies, as appropriate.

If you have any questions about the need for a permit, the permitting process, or completing the joint permit application, contact the Corps of Engineers for a pre-application site visit. Corps staff can often help you minimize adverse impacts or eliminate the need for a Corps permit altogether.

#### ORGANIZATION OF THE JOINT APPLICATION

The basic application, appendices, and various acknowledgement forms are located in the front of the booklet. The general information section which contains a regulatory and resource agency directory, information on penalties, processing procedures, definitions and special terms, and the most frequently asked questions is located in the back of the booklet.

If you are submitting this application as a Pre-Discharge Notification (PDN) under the the Corps Nationwide permit program, 33 CFR 330 (Appendix A, Part C), you must clearly identify it by writing the letters PDN at the top of the first page of the basic application.

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#### **BASIC APPLICATION FORM**

## JOINT PERMIT APPLICATION FOR ACTIVITIES IN WATERS AND WETLANDS OF THE COMMONWEALTH OF VIRGINIA

#### PLEASE PRINT OR TYPE ALL ANSWERS:

If a question does not apply to your project please print N/A (not applicable) in the block or space provided. If additional space is needed, attach extra 8-1/2" x 11" sheets of paper. If you are unsure of a particular term, please refer to the definitions section.

la.	Applicant's name and complete address: Mr., Mrs., Ms. (circle one)	Telephone numbers: Home (A/C) Work (A/C)
1b.	Property Owner's name and complete address: (if different from above)	Telephone numbers: Home (A/C) Work (A/C)
2. and o	Authorized agent's name complete address (if applicable):	Telephone numbers: Home (A/C) Work (A/C)
	Have you obtained a contractor for the project?Yes ainder of this question and submit the Applicant's and Contapplication.	No If your answer is "yes" complete the tractor's Acknowledgement Form on page 47 with
	Contractor's name and complete address:	Telephone numbers: Home (A/C) Work (A/C)
4. proje	List the name, address, and telephone number of the nevect. Failure to complete this question may delay Local and	vspaper having general circulation in the area of the I State processing.
	Name and complete address:	Telephone number: (A/C)
		·

5. F	Please give the name of the waterbody at the project site, the county or city the project is located in, and ctions to the site:	
	a tributary to	
	located inCounty/City	
	County/City	
Jive city	e descriptive directions to the project site from the nearest intersection of two state roads within that count and visible points of reference:	y or
H		
- 11		H.
H	IF THE PROJECT SITE IS LOCATED IN AN UNDEVELOPED SUBDIVISION OR PROPERTY, CLEARLY STAKE AND IDENTIFY PROPERTY LINES AND LOCATION OF PROPOSAL. A	
	IF THE PROJECT SITE IS LOCATED IN AN UNDEVELOPED SUBDIVISION OR PROPERTY, CLEARLY STAKE AND IDENTIFY PROPERTY LINES AND LOCATION OF PROPOSAL. A SUPPLEMENTAL MAP THAT SHOWS HOW THE PROPERTY IS TO BE DIVIDED SHOULD ALSO BE PROVIDED.	
	ALSO BE PROVIDED	
	IF THE PROJECT SITE IS LOCATED IN AN UNDEVELOPED SUBDIVISION OR PROPERTY, CLEARLY STAKE AND IDENTIFY PROPERTY LINES AND LOCATION OF PROPOSAL. A SUPPLEMENTAL MAP THAT SHOWS HOW THE PROPERTY IS TO BE DIVIDED SHOULD ALSO BE PROVIDED  State the project purpose and provide a brief description of the project:	
	ALSO BE PROVIDED	
	ALSO BE PROVIDED  State the project purpose and provide a brief description of the project:	
	ALSO BE PROVIDED	
).	State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural	
).	ALSO BE PROVIDED  State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown	
).	State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown Nontidal wetlands River River	łł
	ALSO BE PROVIDED  State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown Nontidal wetlands River	łł
	State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown Nontidal wetlands River River	łł
3.	State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown Nontidal wetlands River Vegetated Shallows Other (explain - e.g. Intermittent stream, vernal pool, etc.)	łł
). /.	State the project purpose and provide a brief description of the project:  Please place a checkmark next to as many of the following that describe your project site:  Tidal waters 100 year floodplain Natural Tidal wetlands Lake or Pond Man-made Nontidal waters Mudflats Unknown Nontidal wetlands River Vegetated Shallows Vegetated Shallows Other (explain - e.g. Intermittent stream, vernal pool, etc.)	łł —

• 1

9.	Will the project impact (flood, drain, excava Yes No Uncertain	ite, dredge, fill, shade, etc.)	wetlands?
If you	answer is "YES", please indicate:		
	A. vegetated wetlands area(s) to be impacted tidalsquare feetnontidalB. nonvegetated tidal wetlands area(s) to be	square feet	square feet
10. not lin	Will the project be located at the site of any nited to archeological sites, Civil War earthwar Yes No If "Yes", please provided in the project be located at the site of any nited to archeological sites, Civil War earthwar Yes No If "Yes", please provided in the project be located at the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of any nited to archeological sites, Civil War earthwar yes No If "Yes", please provided in the site of a site o	vorks, graveyards, building	s, bridges, canals, etc.)
11.	Have you previously contacted the Departm Yes No If "Yes", please prov		
	a. VDHR file number:		
	b. Response date:		
	c. Type of response (no effect/no adverse	effect, additional information	on requested, survey requested,
	further consultation needed):		
12. If "Ye	Is your project located within a historic dis s", please indicate which district:		
13.	Has a survey to locate archeological sites a Yes No If "Yes", please pro-		
	a. Date of survey:		
	b. Name of firm:		
	c. Is there a report on file with the Virginia	a Department of Historic Re	esources?
	d. Was any historic property located?		
	Have you previously had a site visit, applied for any portion of the project described in the ses No If your answer is "Your answer is "You will be a site visit, applied for any portion of the project described in the set of t		project at the site?
Name	of Representative:		
Agen	Activity	Application Number	Action Taken (check the appropriate box)
		_	Issued Denied
			Withdrawn Site Visit
Date	Action taken	_	<del></del> -

15. a) Has any work commenced or has any portion of the project for which you are seeking a permit been completed? Yes No
b) Are you submitting this application at the direction of any state, local or federal agency?YesNo If your answer to either question above is "YES", give details below stating when the work was completed, who performed the work, and which agency (if any) directed you to submit the application. (Please clearly differentiate on your application drawings that portion of the work which has been completed from that which is proposed.)
16. Approximately how long will it take to complete the project after all required permits have been issued?  months
17. Approximate cost of the entire project (materials, labor, etc): \$ Approximate cost of only that portion of the project which affects State Waters (below mean low water in tidal areas or ordinary high water in nontidal areas): \$
18. List the name and complete mailing address of each adjacent property owner to the project.
19. List the name and complete mailing address of each waterfront property owner across the waterway from the project, if the water body is less than 500 feet wide. Also, if the project is within a cove, list the name and address of each property owner located on the cove.
20. All affected property owners must be notified of the proposed plans. If you do this yourself, it will assist us in processing your application. Have you discussed this project with all affected parties and had them sign an Adjacent Property Owner's Acknowledgement Form? Yes No If your answer is yes, the acknowledgement forms must be included with this application.

21. Check the appendices below which apply to your project. NOTE: The applicable appendices must be completed and submitted as part of your application. Additional appendices can be provided upon request. If you are proposing multiple activities, you may submit one plan view drawing provided all the required information for each activity is included (e.g. if your proposal includes a pier, boathouse and dredging, you may show all activities on a single plan view drawing). A sample drawing for each activity is located on the back of the corresponding appendix. Although the sample drawings are condensed so that the plan view, cross section, end view, and vicinity maps are all on one page, you do not have to limit your drawings to one page. Drawings submitted need not be prepared by a professional draftsman as in these samples.

	Appendix J Appendix K Appendix L Appendix M Appendix N Appendix O Appendix P	LIST OF APPENDICES Private Piers & Marginal Wharves Boathouses Marinas & Commercial Piers Dolphins-Mooring Piles-Buoys Not Associated w/Piers Boat Ramps Bulkheads & Associated Backfill Fill Riprap & Associated Backfill Marsh Toe Stabilization Dredging/Mining/Excavating Groins & Jetties Breakwaters Beach Nourishment Intake - Outfall Structures Stream Channel Modifications Impoundments/Dams				
	Appendix Q Appendix R	Utility Crossings Road Crossings (Bridges-Tunnels-Culverts)				
	Addendum	Department of Environmental Quality Additional Requirements  ALL APPLICANTS MUST SIGN				
authorized rep		its for the activities I have described herein. I agree to allow the duly ulatory or advisory agency to enter upon the premises of the project site at ograph site conditions.				
I hereby certify	I hereby certify that the information submitted in this application is true and accurate to the best of my knowledge.					
APPLICANT	S SIGNATURE	APPLICANT'S NAME (PRINTED/TYPED)				
DATE						

REMINDER: BE SURE TO COMPLETE THE APPENDICES YOU CHECKED ABOVE AND SUBMIT WITH THE BASIC APPLICATION FORM (PAGES 3-7). MAIL ALL INFORMATION TO:

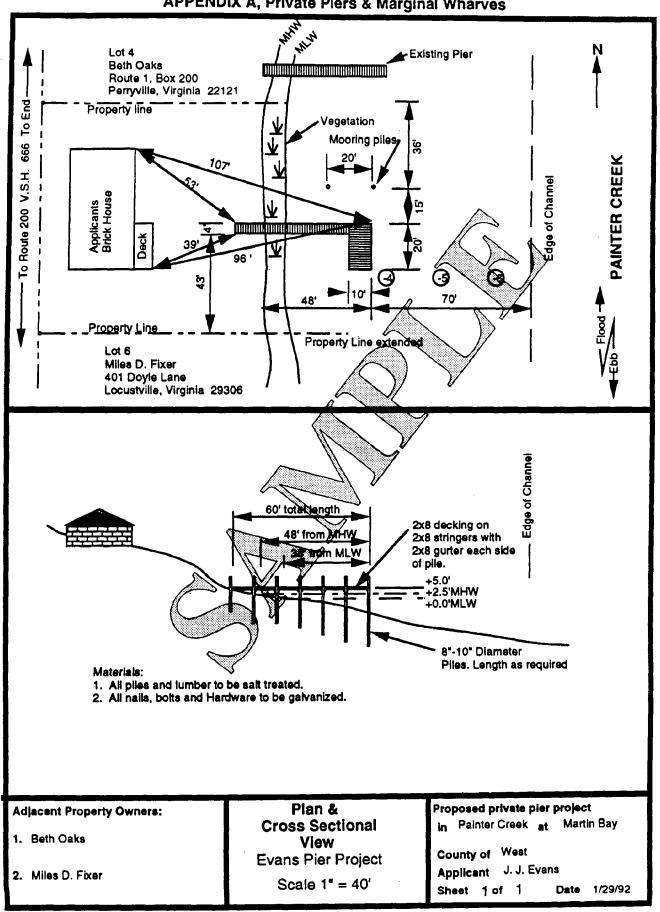
Virginia Marine Resources Commission Habitat Management Division P. O. Box 756 Newport News, Virginia 23607

#### APPENDIX A -- PRIVATE PIERS AND MARGINAL WHARVES

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan	View Drawing			
	_ north arrow			
	_ waterway name			
	_ existing structures	4- 641-466-		
	_ benchmarks snowing distance	es to fixed points of refer	ence	
	_ mean low water and mean nig	gn water lines (ugai)		
	_ ordinary high water line (non	tidal)		
	existing structures benchmarks showing distance mean low water and mean his ordinary high water line (non location of vegetated wetland shoreline, property lines, and	s at the project site	(:C:	1
	_ shoreline, property lines, and	location of adjacent proj	perty owners (if in a co	ove or the waterway is less
	man boo reel wide, also snov	v uie iocauoii oi uie biob	erry owner across from	n me sne)
	_ distance the proposed structu	re will be located from th	e adjoining property li	ines
	width of the waterway (meas	uring from mean high wa	iter to mean high wate	er (tidal) or ordinary high
	water to ordinary high water	(nontidal)		
	ebb and flood (tidal) or direct location and distance from ex	uon of flow (nontidal)		
	_ location and distance from ex	isung channels (marked a	and/or unmarked)	0 foot internal
	soundings taken at mean low	maker (muar) or at run po	of level (nonudat) at 1	ond man law water lines
	channelward encroachment (in dimensions of pier and all L	T hand section pletform	eranve to mean mgn a	and mean low water lines
	_ distance between the structur		or deck	
	<ul> <li>existing contours of the bottomean high and mean low water ordinary high water level (no height of pier over existing by the project site must be included Number of vessels to be more</li> </ul>	er levels (tidal areas) ntidal areas) ottom or marsh peat surf e map from which the vic l (U.S.G.S. quad sheet, st	ace inity map was taken a reet map, or county m	nd the exact location of the nap is preferred).
2.	Provide the registration num	ber of vessel(s):		
	registration		_ type of	vessel
	registration		_ type of	vessel
	registration			vessel
•				
3.	Give type (e.g. sail, power, s	skiff, etc.) and size of ves	sei(s) to be moored at	t the pier:
	type	length	width	draft
	type	length	width	draft
	type	length	width	draft

#### **APPENDIX A, Private Piers & Marginal Wharves**

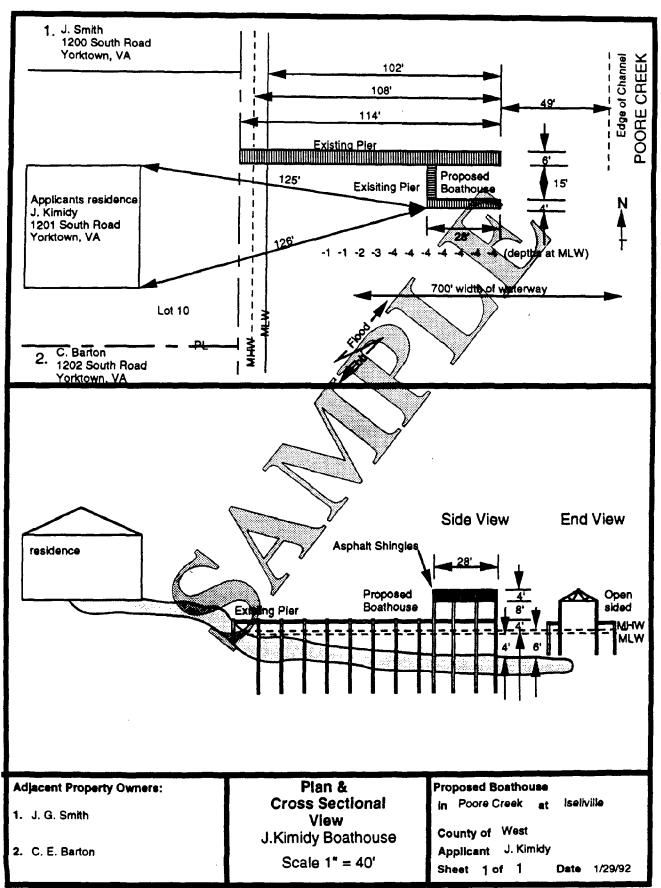


#### APPENDIX B -- BOATHOUSES

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	iew Drawing
	north arrow
	waterway name
	existing structures
	benchmarks showing distances to fixed points of reference
	mean low water and mean night water lines (udai)
	ordinary high water line (nonudal)
	existing structures benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) location and distance from existing channels channelward encroachment (including mooring piles) relative to mean high and mean low water lines dimensions of the boathouse, catwalks, or other structures distance between the structure and mooring piles
	dictance between the structure and macring piles
	soundings taken at mean low water (tidal) or at ordinary high water (nontidal) at 10-foot intervals
	soundings taken at mean low water (deat) of at ordinary mgn water (nondeat) at 10-100t microals
	iew Drawing mean high and mean low water levels (tidal) ordinary high water level (nontidal) dimensions of the proposed boathouse height above mean high and mean low water level material to be used for construction
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
1.	Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored at the boathouse:
	typelengthwidthdraft
	typelengthwidthdraft
	typelengthwidthdraft
2.	Will the sides of the boathouse be enclosed? Yes No
3.	Provide the registration number of vessel(s):
	registration type of vessel
	registration type of vessel
	registration type of vessel

#### **APPENDIX B, Boathouses**

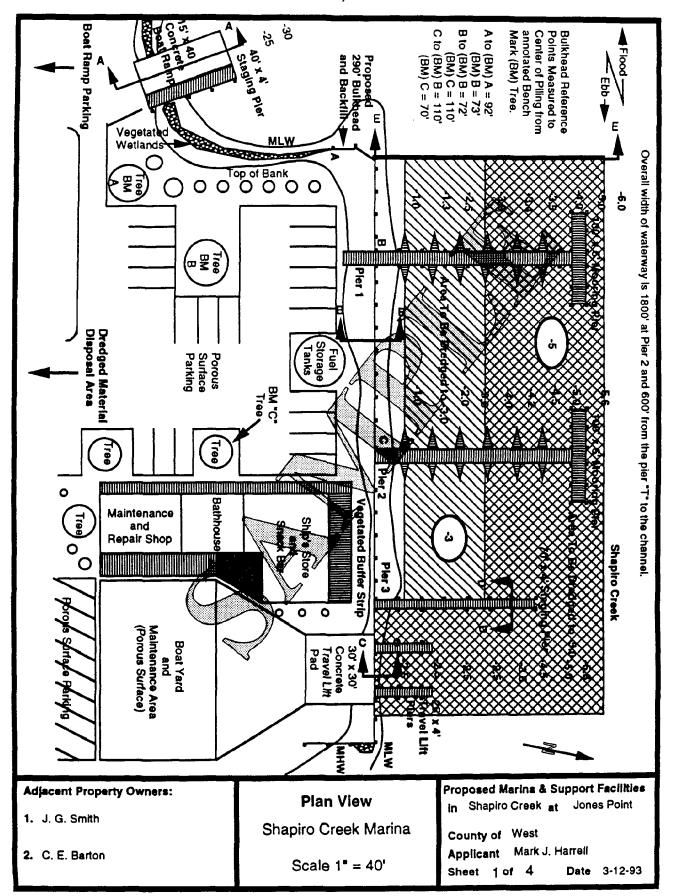


#### APPENDIX C -- MARINAS AND COMMUNITY PIERS

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	View Drawing				
	_ north arrow				
	_ waterway name				
	existing structures				
	henchmarks showing distances	to fixed points of refe	rence		
	mean low water and mean high	water lines (tidal)			
	ordinary high water line (nontic	dal)			
	location of vegetated wetlands	at the project site			
	mean low water and mean high ordinary high water line (nontic location of vegetated wetlands shoreline, property lines, and lettan 500 feet wide, also show width of the waterway (measure water to adding the back of the waterway)	ocation of adjacent pro	perty owners (if in a c	ove or the waterway is le	224
	than 500 feet wide, also show t	the location of the proj	nerty owner across from	n the site)	/33
	width of the waterway (measur	ring from mean high w	ater to mean high water	er (tidal) or ordinary high	
	water to ordinary high water (n	nontidal)	der winderingn wat	(uddi) of ordinary ingli	•
	ehb and flood (tidal) or direction	on of flow (nontidal)			
<del></del>	ebb and flood (tidal) or directic location and distance from exis channelward encroachment (in length, width and other pertine distance between the structures soundings taken at mean low y	eting channels			
	_ channelward encroschment (in	cluding mooring piles)	ralativa to maan high	and maan lass sustan line	_
	_ Chainerward encroachment (in	et dimensions of the s	relative to mean mgn	and mean low water lines	<b>S</b> .
	_ length, with and other pertine	an dimensions of the s	iructures		
	_ distance between the structures	s and mooring piles		1) . 10 6	
	_ soundings taken at mean low v	vater (tidal) or at ordin	ary high water (nontida	at 10-foot intervals	
	_ proposed sudetures for conced	ion and nanding of ha	cardous inaceriai (incru	de settling tanks for	
	collection of travel lift washdo		etc.)		
	<ul> <li>location of gasoline storage tar</li> </ul>	ıks			
	dimensions of covered structure material to be used for construction existing contours of the bottom mean high and mean low water ordinary high water level (none height above mean high/mean height of structure(s) over the	ction 1 r levels (tidal)	-	d mean low water level	
	_ Vicinity Map The name of the project site must be included (	map from which the vi (U.S.G.S. quad sheet,	cinity map was taken a street map, or county n	nd the exact location of t	he
1.	Have you obtained the State H (You are required to obtain thi				No
2.	Will petroleum products or oth  Yes No If you	er hazardous materials our answer is yes, plea	be stored or handled a se include your spill o	t the facility? contingency plan	
3.	Will the facility be equipped to	o offload sewage from	boats? Yes	No	
4.	Indicate the number and type of	of slins:			
••	maiouw die namber and type (	ortho.	Wet Slips	Dry Storage	
	Г	Enisting .	WCC OHPS	Diy Storage	
		Existing			
		Proposed			

THE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIRES APPLICANTS TO SUBMIT THE ADDENDUM LOCATED AT THE END OF THIS APPLICATION

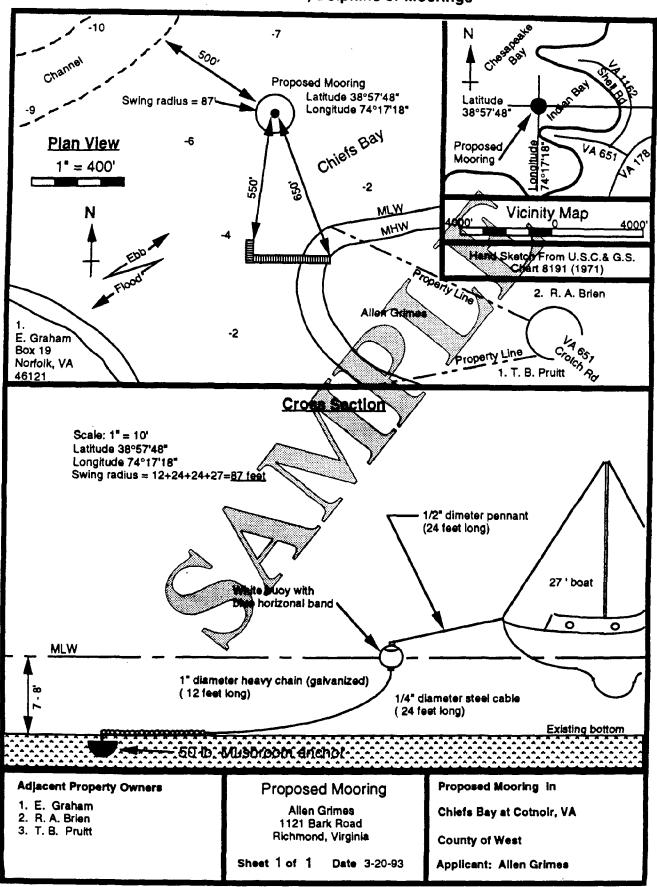


## APPENDIX D -- DOLPHINS OR MOORINGS (not associated with piers)

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

north arrow waterway name existing structures benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		iew Drawing					
existing structures benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:							
benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom exaining and high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		waterway name					
benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom exaining and high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		existing structures					
ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		benchmarks showing distances to fixed points of reference					
ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less than 500 feet wide, also show the location of the property owner across from the site) width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal) ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		mean low water and mean high water lines (tidal)					
width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal)  ebb and flood (dad) or direction of flow (nontidal)  type of mooring (buoy, pile, dolphin)  anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		ordinary high water line (nontidal)					
width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal)  ebb and flood (dad) or direction of flow (nontidal)  type of mooring (buoy, pile, dolphin)  anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		location of vegetated wetlands at the project site					
width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high water to ordinary high water (nontidal)  ebb and flood (dad) or direction of flow (nontidal)  type of mooring (buoy, pile, dolphin)  anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		shoreline, property lines, and location of adjacent property owners (if in a cove or the waterway is less					
ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		than 500 feet wide, also show the location of the property owner across from the site)					
ebb and flood (tidal) or direction of flow (nontidal) type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		width of the waterway (measuring from mean high water to mean high water (fidal) or ordinary high					
type of mooring (buoy, pile, dolphin) anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		abb and flood (tidal) or direction of flow (nontidal)					
anchoring device and weight latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		type of magring (hugy, nile, dolphin)					
latitude and longitude of mooring location and distance from existing channels total swing radius  Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		anchoring device and weight					
cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:  Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored:  type length width draft  type length width draft  Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If		latitude and longitude of mooring					
cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:  Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored:  type length width draft  type length width draft  Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If		location and distance from existing channels					
Cross Section Drawing type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  1. Give the number of vessels to be moored:		total swing radius					
type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:							
type of mooring length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:	Cross	Section Drawing					
length of chain and line used weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:							
weight and type of anchor material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		length of chain and line used					
material to be used for construction existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		weight and type of anchor					
existing contours of the bottom mean high and mean low water levels (tidal) ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  Give the number of vessels to be moored:		material to be used for construction					
ordinary high water level (nontidal)  Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  1. Give the number of vessels to be moored:		existing contours of the bottom					
Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  1. Give the number of vessels to be moored:		mean high and mean low water levels (tidal)					
project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).  1. Give the number of vessels to be moored:  2. Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored: typelengthwidthdraft typelengthwidthdraft  3. Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If		ordinary high water level (nontidal)					
1. Give the number of vessels to be moored:							
<ol> <li>Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored:        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        type</li></ol>		project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).					
<ol> <li>Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored:        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        typelengthwidthdraft        type</li></ol>	_						
typelengthwidthdrafttypelengthwidthdraft  3. Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If	1.	Give the number of vessels to be moored:					
typelengthwidthdrafttypelengthwidthdraft  3. Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If	•						
typelengthwidthdraft  3. Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If	2.	Give type (e.g. sail, power, skiff, etc.) and size of vessel(s) to be moored:					
typelengthwidthdraft  3. Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:  4. Registration/documentation number(s) of the vessel(s):  5. Do you plan to reach the mooring from your own upland property? Yes No If		type length width droft					
<ul> <li>Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:</li> <li>Registration/documentation number(s) of the vessel(s):</li></ul>		typetenguiwiduidiait					
<ul> <li>Name(s) and complete address(es) of the owner(s) of the vessel(s) if other than applicant:</li> <li>Registration/documentation number(s) of the vessel(s):</li></ul>		type length width draft					
4. Registration/documentation number(s) of the vessel(s):							
4. Registration/documentation number(s) of the vessel(s):	2	NT(-) 1 -					
5. Do you plan to reach the mooring from your own upland property? Yes No If	3.	Name(s) and complete address(es) of the owner(s) of the vessel(s) it other than applicant:					
5. Do you plan to reach the mooring from your own upland property? Yes No If							
5. Do you plan to reach the mooring from your own upland property? Yes No If							
5. Do you plan to reach the mooring from your own upland property? Yes No If							
5. Do you plan to reach the mooring from your own upland property? Yes No If	4	Registration/documentation number(s) of the vessel(s)					
	* •	TOBICE BELOW DOWN THE INCIDENCE OF THE POPULOY.					
"No", explain the proposed means of access:	5.	Do you plan to reach the mooring from your own upland property? Yes No If					
		"No", explain the proposed means of access:					
		<u> </u>					

### **APPENDIX D, Dolphins or Moorings**



#### APPENDIX E -- BOAT RAMPS

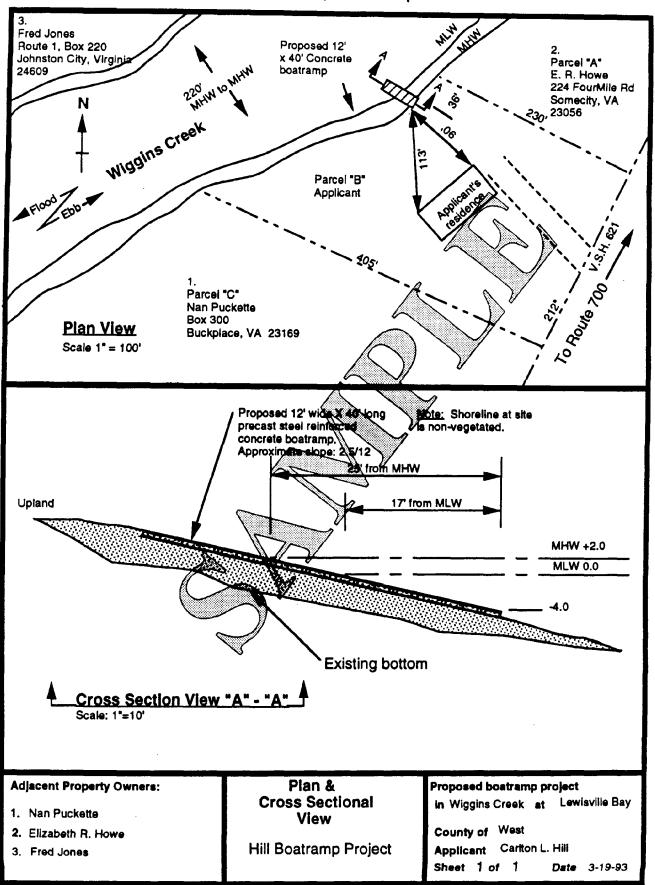
## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	iew Drawing							
	north arrow							
	THE STATE OF THE S							
	existing structures							
	benchmarks showing distances to fixed points of reference							
waterway name existing structures benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high								
	ordinary high water line (nontidal)							
	location of vegetated wetlands at the project site							
	shoreline, property lines, and location of adjacent property owners							
	width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high							
	water to ordinary high water (nontidal)							
	ebb and flood (tidal) or direction of flow (nontidal)							
	dimensions of ramp							
	location and distance from existing channels							
	channelward encroachment relative to mean high and mean low water lines							
	characteristic delicities to the artificial towards the water these							
Cmee	Section Drawing							
CIUSS	material to be used for construction							
	existing contours of the bank and surface							
	mean high and mean low water levels (tidal)							
	ordinary high water level (nontidal)							
	ordinary ingli-valor to to thomasary							
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).							
1.	Will any excavation be required to construct the boat ramp? Yes No If yes, explain how							
	and where you plan on disposing of the excavated material:							
2.	What type of design and materials will be used (e.g. open pile design with salt treated lumber or concrete slab on gravel bedding, etc.)?							
3.	Please give the location of the nearest public boatramp:							
	•							
4	Will any other structures be installed concurrent with the boatramp installation (e.g. tending pier, groin,							
4.								
	etc.)? Yes No If "Yes", please include the appropriate appendices.							
5.	Will any portion of the project be placed on wetlands? Yes No							
If your answer is yes, indicate the square footage and type of area(s) to be impacted:								
	if your answer is yes, murcate the square rootage and type of area(s) to be impacted.							
	Tidal Nontidal							
	Vegetated wetlands sf sf							
	Non-vegetated wetlands sf							

FOR COMMERCIAL BOATRAMPS, THE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIRES APPLICANTS TO SUBMIT THE ADDENDUM LOCATED AT THE END OF THIS APPLICATION

Subaqueous land

#### APPENDIX E, Boat Ramps

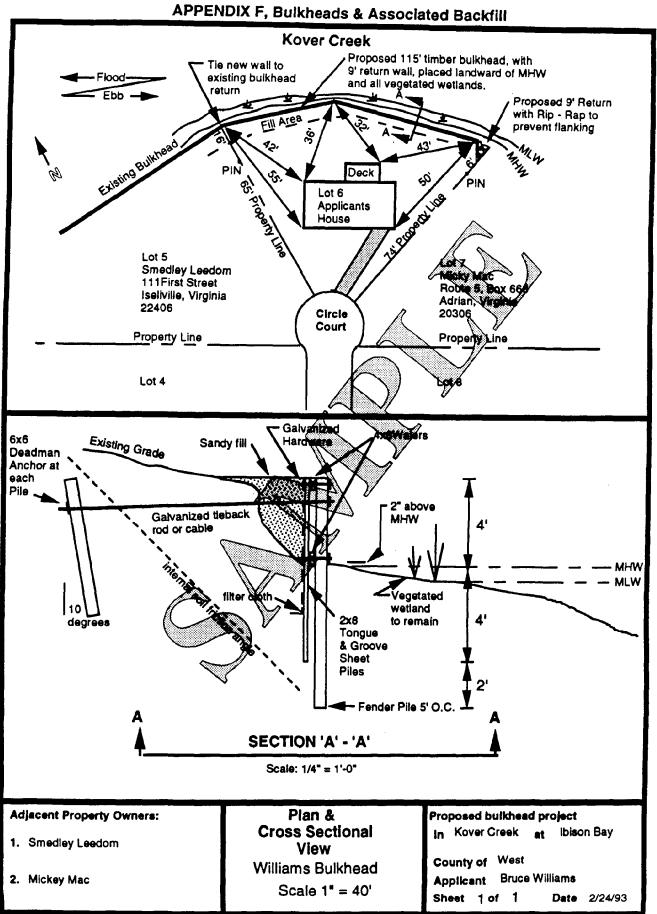


#### APPENDIX F -- BULKHEADS & ASSOCIATED BACKFILL

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	iew Drawing north arrow
	waterway name
	existing structures benchmarks showing distances to fixed points of reference
	benchmarks showing distances to fixed points of reference
	maan law water and mean nigh water lines (11/191)
	ordinary high water line (nontidal)
	ordinary high water line (nontidal) channelward encroachment relative to mean high/mean low/ordinary high water lines location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners
	location of vegetated wetlands at the project site
	shoreline, property lines, and location of adjacent property owners
	ebb and flood (tidal) or direction of flow (nontidal)
	return walls (if applicable)
	connection with existing bulkhead(s) (if applicable)
	proposed riprap scour protection (if applicable)
	proposed backfill
	proposed backfill length of bulkhead
	Tought of Danmiens
Cross	Section Drawing
	design & dimensions including all structural components (i.e. deadmen, knee braces, sheeting, etc.)
	material to be used for construction
	existing contours of the bottom and marsh peat surface
	mean high and mean low water levels (tidal)
	ordinary high water level (nontidal)
	proposed backfill
	base width and height of proposed riprap scour protection (if applicable)
	filter cloth
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the
	project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
1	a). In any partian of the project maintenance or replacement of an existing and aurently considerable
1.	a) Is any portion of the project maintenance or replacement of an existing and currently serviceable
	bulkhead and/or backfill? Yes No Linear feet existing:
	b) If yes, is it possible to construct the new bulkhead no greater than 2 feet channelward of the existing
	bulkhead? Yes No If your answer is "No", explain:
2.	Describe type of construction and materials to be used, including source of backfill material and its
	composition (e.g. 80% sand, 15% clay and 5% silt), and all fittings for the bulkhead:
	composition (e.g. 60% said, 15% oray and 5% sitt), and an intings for the buildiness.
•	******
3.	Will any portion of the project be placed on wetlands or subaqueous land? Yes No
	If your answer is yes, indicate the square footage and type of area(s) to be impacted:

	Tidal	Nontidal
Vegetated wetlands	sf	sf
Non-vegetated wetlands	sf	
Subaqueous land	sf	sf



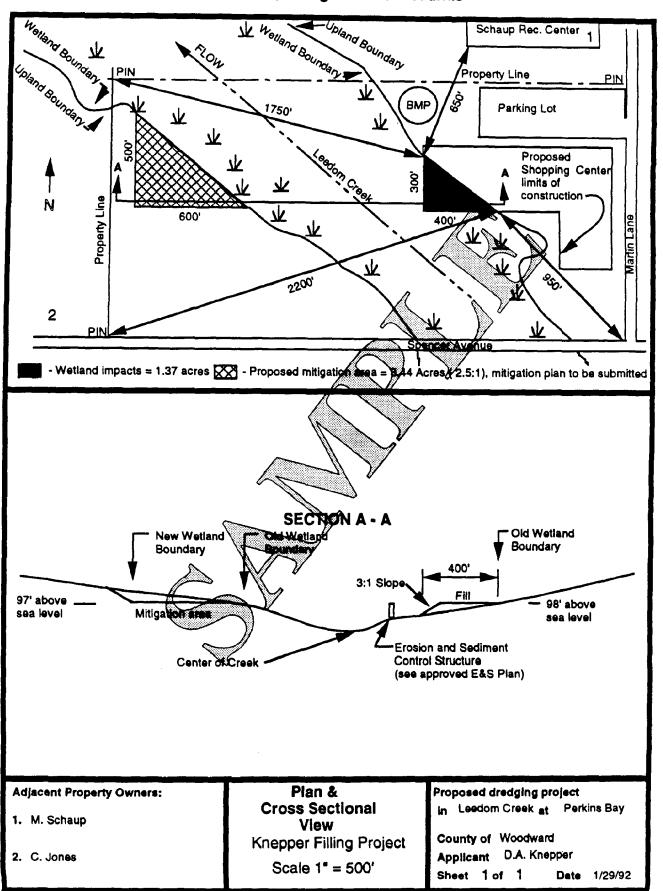
#### APPENDIX G -- FILL

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

	iew Drawing								
	north arrow waterway name (if app	Jicobla)							
	dimensions of area to	re filled							
	existing structures	oc inicu							
	benchmarks showing	distances to fixed points of	reference						
	existing structures benchmarks showing distances to fixed points of reference location of vegetated wetlands at the project site								
	- property lines, and loc	ation of adjacent property (	owners						
	mean low water and mean high water lines (tidal)								
<del></del>	ordinary high water line (nontidal) channelward encroachment relative to mean high/mean low water lines (tidal) or ordinary high water line								
	(nontidal)	ment relative to mean mgn	mean low water mies	(udar) of oldmary filgh water h	ше				
	(nontidal) width of the waterway	(if applicable)							
	ebb and flood (tidal) o	r direction of flow (nontida	പ)						
	Section Drawing								
	existing contours of the	e bottom							
	elevation of proposed structure or method us	IIII ed to contain fill							
	mean high and mean l	ow water levels (tidal)							
	ordinary high water le	vel (nontidal)							
		e of the map from which the cluded (U.S.G.S. quad she		en and the exact location of that the map is preferred).	ne				
1. 2.	What is the source and amount of the fill material? cubic yards State the type and composition percentage of the fill material (e.g. 80% sand, 15% clay, 5% silt):								
3.	Explain the purpose of the filling activity & the type of structure to be built on the filled area:								
				·					
4.	If filling activity is pro	posed in a wetlands, what	is the distance from th	e nearest waterbody?					
5.	Will any of the fill be placed on wetlands or subaqueous land? Yes No If your answer is yes, indicate the square footage and type of area(s) to be impacted:								
			Tidal	Nontidal					
		Vegetated wetlands	sf	sf					
		Non-vegetated wetlands	sf						
		Subaqueous land	sf	sf					
6.	Describe the method(s	s) that will be used for sedi	mentation and erosion	control:	<del></del>				
_				_					
7.	What is the approxima	ate drainage area and avera	ge stream flow?	square miles cfs	_				

THE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIRES APPLICANTS TO SUBMIT THE ADDENDUM LOCATED AT THE END OF THIS APPLICATION

## APPENDIX G, Filling Waters / Wetlands

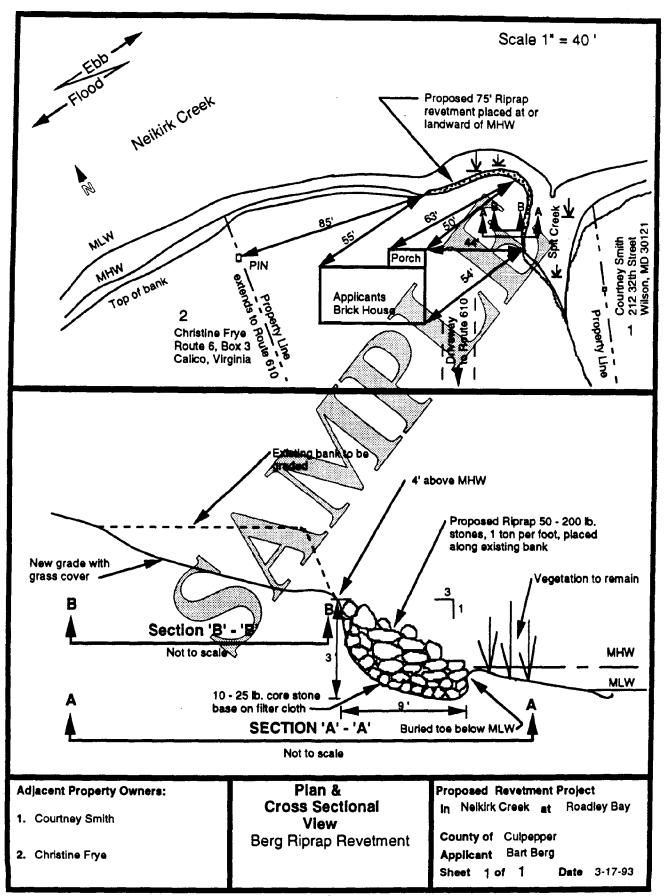


## APPENDIX H -- RIPRAP REVETMENT & ASSOCIATED BACKFILL

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan	View Drawing							
	_ north arrow							
	existing structures							
	benchmarks showing	distances to fixed points of	reference					
	mean low water and r	nean high water lines (tidal)	)					
	ordinary high water li	ne (nontidal )						
	location of vegetated	wetlands at the project site		r				
	shoreline, property lit	nes and location of adjacer	t property owners					
	ebb and flood (tidal)	or direction of flow (nontide	al)					
	waterway name existing structures benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners ebb and flood (tidal) or direction of flow (nontidal) channelward encroachment relative to mean high/mean low/ordinary high water lines connection with existing bulkhead or riprap structures (if applicable)							
	connection with exist	ing bulkhead or riprap struc	rtures (if applicable)	on water mices				
	proposed backfill	ang cumulous of riprup ou uc	ruies (ii applicable)					
	length of revetment							
	_ length of levelinent							
Cros	s Section Drawing							
	_ proposed backfill							
	mean high and mean	low water levels (tidal)			/			
	_ ordinary high water (	nontidal) he shoreline and/or bank ed revetment						
	existing contours of t	he shoreline and/or bank						
	dimensions of propos	ed revetment						
	filter cloth							
	buried toe or riprap a	oron						
	proposed grading of e	existing bank relative to me	an high/ordinary high y	vater				
-								
	Vicinity Map The nan	ne of the map from which the	he vicinity map was tak	en and the exact locat	tion of the			
		ncluded (U.S.G.S. quad she						
				-				
1.	What will be the average	amount of material (placed belo			ter) per linear			
	foot of shoreline?	cu.yd(s).per ft.	OR	ton(s) per ft.				
2.	What tune of material wil	Il be used for construction of the	rincan revetment (e.g. gua	rry stone kinder blocks e	ate 19			
۷.	What type of material wil	The dece for consuded on the	riprap revenuent (e.g. qua					
3.	What will be the average		re material (bottom layers)					
		Ал	mor material (top 2 layers)	pounds per sto	ne			
4	If the sovetment will be b	col-filled describe the composit	ion of the meterial to be us	ad (a.g. 90% sand 15% a	low and 5% cilt)			
4.	ii the revenient will be b	ackfilled, describe the composit	ion of the material to be us	eu (e.g. 80% Sanu, 13% C	lay and 3% sin)			
				<del></del>				
5.	What is the source of the	backfill material?						
6.	Will any portion of the pr	roject be placed on wetlands or s	subaqueous land? Y	es No				
٥.	If your answer is yes, indi	icate the square footage and type	of area(s) to be impacted:					
			Tidal	Nontidal	$\neg$			
		Vegetated wetlands	sf		f			
		Non-vegetated wetlands	sf					
		Subaqueous land	sf sf		ef .			

## APPENDIX H, Riprap Revetment & Associated Backfill

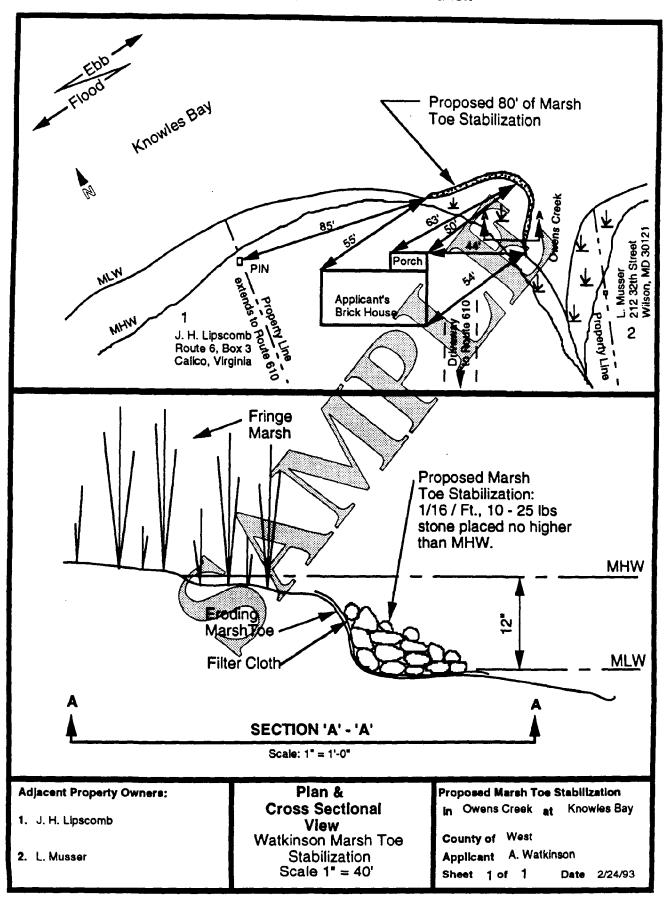


### APPENDIX I -- MARSH TOE STABILIZATION

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	lew Drawing
	north arrow
	waterway name
	mean low water and mean high water lines (tidal)
	ordinary high water line (nontidal)
	existing and proposed structures showing distance relative to mean high/mean low/ordinary high water
	benchmarks showing distances to fixed points of reference
	location of vegetated wetlands at the project site
	shoreline, property lines, and location of adjacent property owners
	ebb and flood (tidal) or direction of flow (nontidal)
	length of structure
Cmss	Section Drawing
	mean high and mean low water levels (tidal)
	ordinary high water level (nontidal)
	existing contours of the bottom and marsh peat surface
	dimensions of proposed structure
	deadmen, tie-backs, knee braces, or other methods to be used to anchor the structure
	filter cloth
	buried toe or riprap apron
	Commence on a specific and a specifi
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
1.	What type of material will be used (e.g. quarry stone, cinder blocks, treated tongue and groove timber, etc.)?
2.	If riprap will be used for construction, provide the following information:  a) average amount of cubic yards OR tons used per linear foot of structure?cu.yd(s)ton(s)  b) will filter cloth be used?YesNo  c) average weight of the: Core material (bottom layers) pounds per stone  Armor material (top 2 layers) pounds per stone
2	Will any nowice of the project he placed on westends or subsqueezes land?
3.	Will any portion of the project be placed on wetlands or subaqueous land?YesNo If your answer is yes, indicate the amount and type of area(s) to be impacted:
	Square feet
	Vegetated wetlands
	Non-vegetated wetlands
	Subaqueous land
	Subaqueous faire

## **APPENDIX I, Marsh Toe Stabilization**



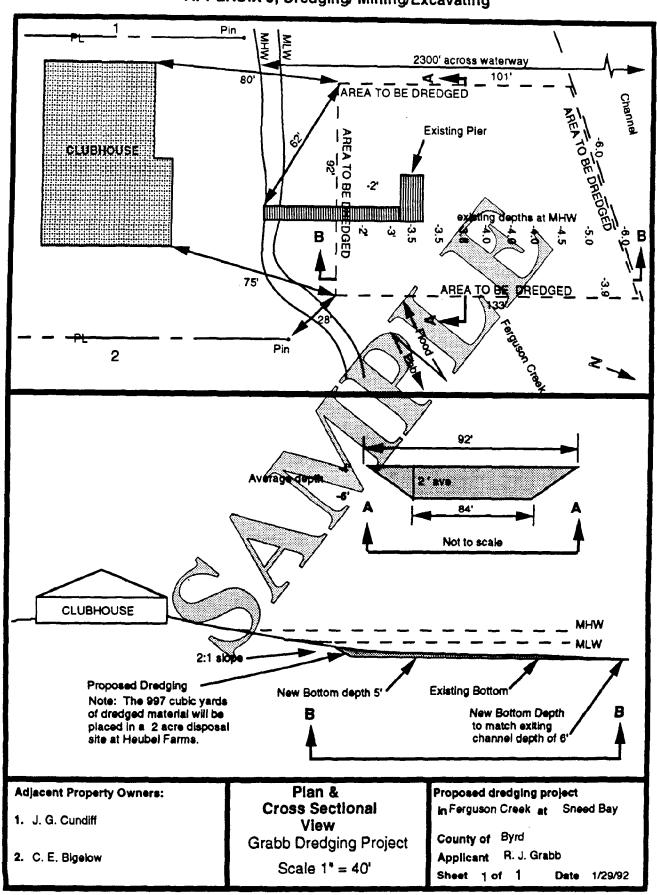
### APPENDIX J -- DREDGING/MINING/EXCAVATING

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan Vi	iew Drawing									
	north arrow									
	waterway name									
	existing structur		ring from ma	on high water	ta maan hi	ah u	entor (tidal) c	e oedinom: his	h water to and	nom, high
	width of the wat water (nontidal)		ing nom me	an mgn water	io mean m	gn w	ater (udai) (	or ordinary mg	n water to ord	nary nign
	ebb and flood (ti		n of flow (no	ontidal) .						
	location and dim									
<del></del>	benchmarks sho				•					
	mean low water					vatei	line (nontid	al)	,	
	location and aer									
	shoreline, prope		ocation of ad	jacent property	y owners				•	
	location of exist				. 4. 4.					
	location of dredg					ntad	wetlande			
	existing depths i							ater (nontidal)		
	thicking depute	die project d			or (dom) o	· OI G	, ,,	der (nonder)		
	Section Drawing f						Cross Section	on Drawing for	Disposal Are	A
	existing contours							sed berms	_	
	dredge cut - slope							osed spillways		
	existing depths ba						pondi	ng depth of dre	edged material	
	existing depths ba proposed project d			(nonudai)						
I	proposeu project u	icpuis (aitei uit	ouging)							
	Vicinity Map The included (U.S.C						en and the e	cact location o	f the project s	ite must be
the mat	off-site disposal ar terial will be trans w many cubic yard	ported. Is of material w	vill be dredge		cation, din	nens	ions, benchn	·	• •	s, and how
		NE		I a:	Ta	7		MAINTE		Ta
		Hydraulic	Dragline	Clamshell	Other	4	Hydraulic	Dragline	Clamshell	Other
	ted Wetlands	<del> </del> -	·	<del> </del>		4				<del>                                     </del>
	eg. Wetlands	<del> </del>	<del></del>			4			<u> </u>	<del>                                     </del>
Subaqu	eous Land		<del></del>			4				
Total										
2.	State the compo	osition of the n	naterial (e.g.	clay 25%, san	ıd 25%, sil	_ t 50°	%):			
3. How will the dredged material be retained to prevent re-entry into the waterway?										
3.	How will the dr	edged material	be retained	to prevent re-e	ntry into th	e wa	iterway?			
3. 4.	Will the dredge	d material be u	sed for any	commercial pu	rpose?	>	res N	lo		
	Will the dredge For mining proj (Apr - Sep), cub	d material be u jects: a. Expla bic yards to be:	ised for any o	commercial pu tion plans on a	rpose?	Y	es N of paper. e	lo .g. frequency (	e.g. every 6 w	ks), duration ment will
4.	Will the dredge For mining proj	d material be u jects: a. Expla bic yards to be a ge site.	ised for any o ain the opera removed per	commercial pu tion plans on a operation, tem	rpose? a separate s aporary sto	 sheet rage,	es N of paper. e handling of	lo .g. frequency ( dredged mater	e.g. every 6 w rial, how equip	ks), duration ment will
4.	Will the dredge For mining proj (Apr - Sep), cub access the dredge	d material be u jects: a. Expla- bic yards to be ge site. plied for a per-	ised for any on the operate removed per mit from the	commercial pution plans on a operation, tem	rpose?a separate s a porary sto Mines, Min	\ sheet rage, eral:	es N of paper. e handling of s, & Energy	lo .g. frequency ( dredged mater ? Yes	e.g. every 6 w rial, how equip No	ks), duration ment will
4. 5.	Will the dredge For mining proj (Apr - Sep), cut access the dredg b. have you ap	d material be usects: a. Explain yards to be see site.  The policy of th	ised for any on the operate removed per mit from the age area and	commercial pution plans on a operation, tem  VA Dept of Naverage stream	rpose? a separate : aporary sto Mines, Min n flow?	sheet rage, erals	es N of paper. e handling of s, & Energy square mil	lo .g. frequency ( dredged mater ? Yes es cfe	e.g. every 6 w rial, how equip No	ks), duratior ment will

THE DEPARTMENT OF ENVIRONMENTAL QUALITY REQUIRES APPLICANTS TO SUBMIT THE APPLICATION

## APPENDIX J, Dredging/ Mining/Excavating

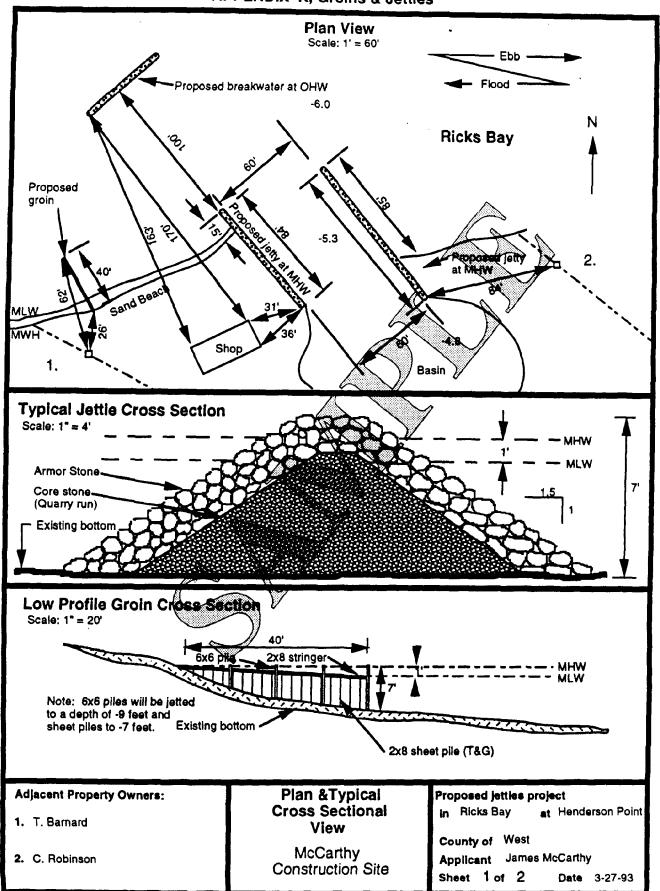


### APPENDIX K -- GROINS & JETTIES

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

	View Drawing
	_ north arrow
	waterway name
	existing structures
	location and dimensions of proposed structure
	_ spacing between structures (both existing and proposed)
	benchmarks showing distances to fixed points of reference
	_ mean low water and mean high water lines (tidal)
	_ ordinary high water line (nontidal)
	_ location of vegetated wetlands at the project site
	_ location and dimensions of proposed structure _ spacing between structures (both existing and proposed) _ benchmarks showing distances to fixed points of reference _ mean low water and mean high water lines (tidal) _ ordinary high water line (nontidal) _ location of vegetated wetlands at the project site _ shoreline, property lines, and location of adjacent property owners _ ebb and flood (tidal) or direction of flow (nontidal) _ location of existing channels
	_ ebb and flood (tidal) or direction of flow (nontidal)
	direction of net sand transport along the shoreline
	_ location of scour protection or spurs (if applicable)
	channelward encroachment relative to mean high/mean low/ordinary high water lines
Cross	s Section Drawing
	_ length and height of structure relative to mean low water (tidal) or ordinary high water (nontidal)
	mean high and mean low water levels (tidal)
	ordinary high water level (nontidal)
	existing contours of the bottom and/or marsh peat surface
	height of channelward end of groin relative to mean low water
	View Drawing (if riprap is used for construction)
	_ design and dimensions of structure (i.e. base & top widths, height, and slope)
	_ Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the
	project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
	project one must be metaded (0.5.0.5. quad sheet, sheet map, or county map is protested).
1.	What type of material(s) are to be used for the construction?
	••
2.	a. If using riprap, what will be the average weight of the:
	Core material (bottom layers) pounds per stone
	Armor material (top 2 layers) pounds per stone
	b. Will filter cloth be used? Yes No
3.	Are there similar structures in the vicinity of the project site? Yes No If your answer
٥.	
	is "yes", describe the type and location of the structures:
4.	Will the channelward end of the structure be marked to show a hazard to navigation? Yes No
5.	Has the project been reviewed by the Shoreline Erosion Advisory Service (SEAS)? Yes No
	If yes, please attach a copy of their comments.

## APPENDIX K, Groins & Jetties

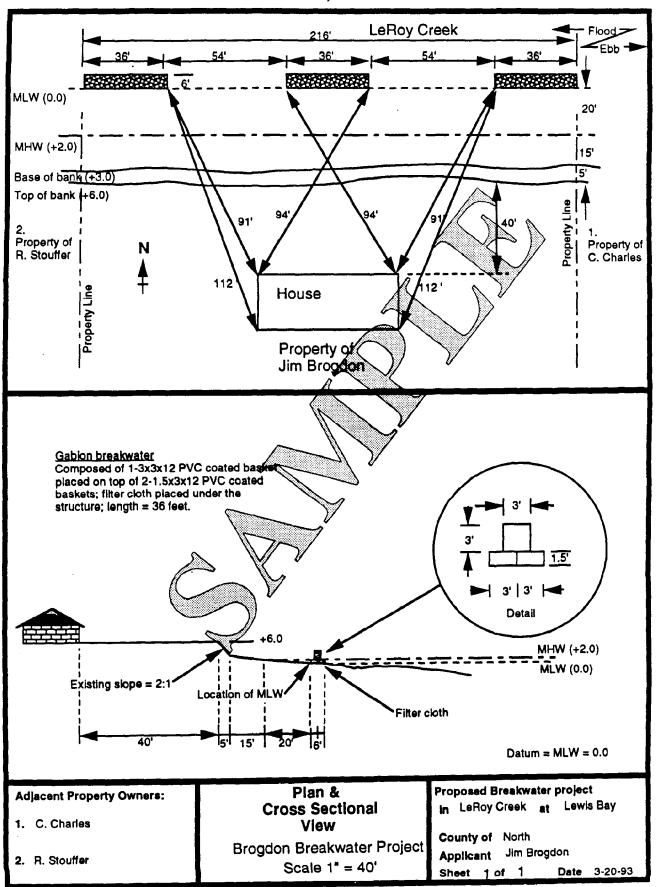


### APPENDIX L -- BREAKWATERS

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

	view Drawing
	north arrow
	waterway name
	existing structures benchmarks showing distances to fixed points of reference
	benchmarks showing distances to fixed points of reference
	mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners ebb and flood (tidal) or direction of flow (nontidal) channelward encroachment relative to mean high/mean low/ordinary high water lines
	ordinary high water line (nontidal)
	location of vegetated wetlands at the project site
	shoreline, property lines, and location of adjacent property owners
	ebb and flood (tidal) or direction of flow (nontidal)
	channelward encroachment relative to mean high/mean low/ordinary high water lines
	dimensions of structure
	Section Drawing
	dimensions of the breakwater
	existing contours of the bottom
	mean high and mean low water levels (tidal)
	ordinary high water level (nontidal)
End V	liew Drawing (if riprap or gabion baskets are used for construction)
	design and dimensions of structure (i.e. base & top widths, height, and slope)
	- · · · · · · · · · · · · · · · · · · ·
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the
	project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
	t along the formal days and the formal days are the formal days and the formal days are the formal days ar
1.	What type of materials are to be used for the construction of the breakwater?
	••
2.	Are there similar structures in the vicinity of the project site? Yes No
	If your answer is "yes", describe the type and location of the structures.
	· · · · · · · · · · · · · · · · · · ·
3	Will filter cloth be used? Yes No

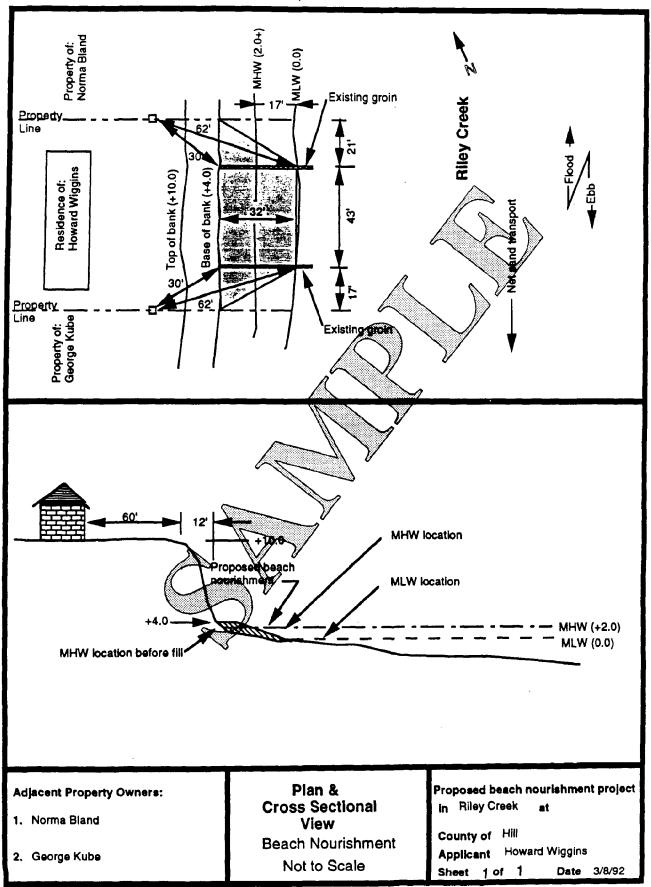
### **APPENDIX L, Breakwaters**



#### APPENDIX M -- BEACH NOURISHMENT

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	n View Drawing	
	north arrow	
	waterway name	
	mean low water and mean high water lines (tidal)	
	ordinary high water line (nontidal)	
	location of vegetated wetlands at the project site	to fixed points of reference
<del></del>	property lines and location of adjacent property owners  existing structures	
	location and dimensions of structures proposed to stabilize the area to be no channelward encroachment of the nourished area relative to mean high/mea location of marsh vegetation to be used for stabilization (if applicable)	ourished n low/ordinary high water
Cross	oss Section Drawing	
	mean high and mean low water levels (tidal)	
	ordinary high water level (nontidal)	
	contour and slope of existing beach	
	contour and slope of the nourished area	nourished amo
	groins, breakwaters or other structures existing or proposed to stabilize the elevation at the channelward end of the nourished area	nourished area
	elevation of vegetation to be planted relative to mean high/mean low/ordina	ry high water
	Vicinity Map The name of the map from which the vicinity map was taken project site must be included (U.S.G.S. quad sheet, street map, or county	and the exact location of the map is preferred).
1.	Provide the following:	
	a. source of material:	·
	b. volume of material:cu	
	c. type and composition of material (e.g. sand 90%, clay 10%):	
	d. mode of transportation to the project site (e.g. truck, pipeline, e	tc.):
2.	Describe the type(s) of vegetation proposed for stabilization and the proposed	ed planting schedule.

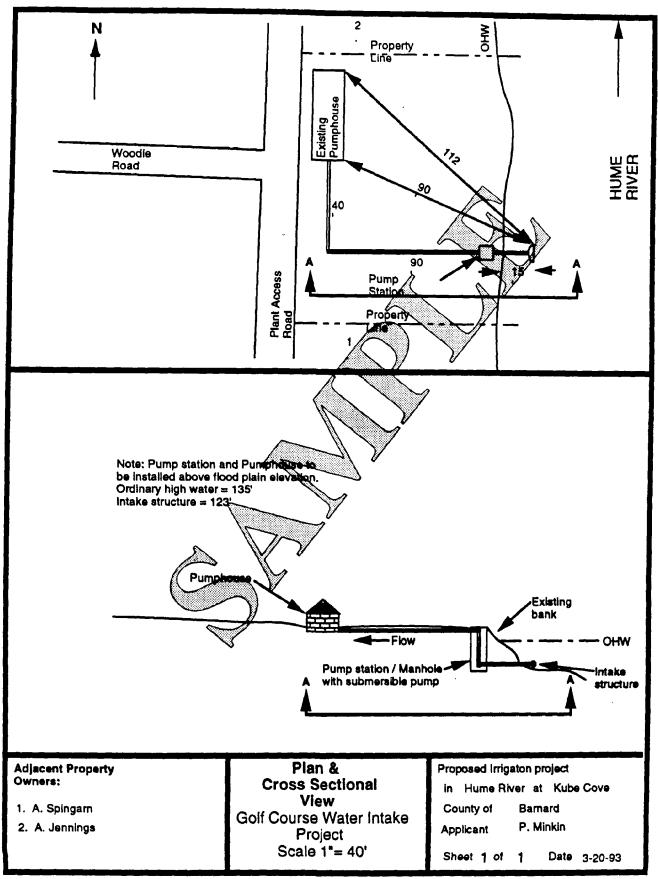


#### APPENDIX N -- INTAKE-OUTFALL STRUCTURES

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	iew Drawing						
	north arrow						
	existing structures dimensions of structure and benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site shoreline, property lines, and location of adjacent property owners ebb and flood (tidal) or direction of flow (nontidal) channelward encroachment relative to mean high/mean low/ordinary high water lines						
	mean low water and mean high water lines (tidal)						
	ordinary high water line (nontidal)						
	location of vegetated wetlands at the project site						
	shoreline, property lines, and location of adjacent property owners						
	ebb and flood (tidal) or direction of flow (nontidal)						
	channelward encroachment relative to mean high/mean low/ordinary high water lines						
	, ,						
Cross	Section Drawing						
	existing contours of the bottom and banks intake or outfall pipe						
	intake or outfall pipe						
	mean high and mean low water levels (tidal)						
	ordinary high water level (nontidal)						
	supporting structures						
	splash apron, if applicable						
	splash apron, if applicable filter cloth						
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).						
1	The life the Called Land Control of the Called						
1.	Provide the following: type & size of pipe: Intake Outfall Intakes: daily rate of withdrawal: mgd velocity: fps screen mesh size: inches mm other (specify)						
	intakes: daily rate of withdrawai: mgd velocity: tps						
	Screen mesh size:inchesmmother (specify)						
	Outfalls: daily rate of discharge: mgd						
2.	If disabages will be the modify and anomaly arraying the maximum temporature						
۷.	If discharge will be thermally enhanced, provide the maximum temperature.						
3.	What is the average stream flow at the: Intake site? cfs Outfall site? cfs						
3.							
4.	What measures are proposed to prevent bank erosion?						
5.	Will any structure (wingwalls, splash apron, etc.) impact wetlands or subaqueous land? Yes No						
	If your answer is yes, indicate the square footage and type of area(s) to be impacted:						
	Tidal Nontidal						
	Vegetated wetlands sf sf						
	Non-vegetated wetlands sf						
	Subaqueous land sf sf						
5.	Can the entire structure or any part of it be placed landward of all wetlands? If no, please explain.						
	,, ,						
6.	What is the approximate drainage area and average stream flow? square miles cfs						

## APPENDIX N, Intake / Outfall Structures

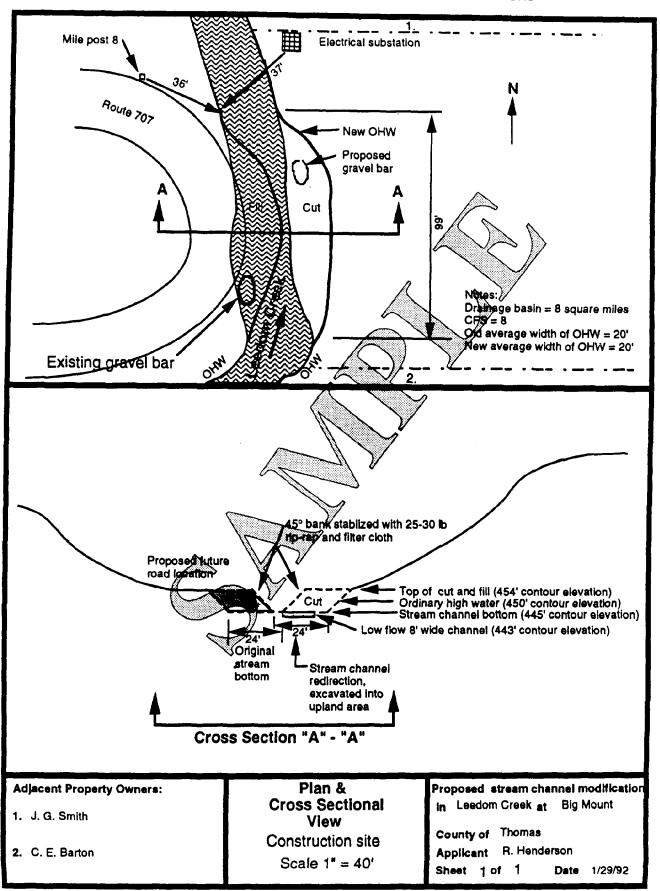


### APPENDIX O -- NONTIDAL STREAM CHANNEL MODIFICATIONS

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	View Drawing
	north arrow
	waterway name
	ordinary high water line
	location, length and width of the existing channel location, length and width of the proposed channel benchmarks showing distances to fixed points of reference width of the stream (measuring from ordinary high water to ordinary high water) location of existing and proposed non-vegetated or vegetated wetlands, bars, islands, riffle and pool
	location, length and width of the proposed channel
	benchmarks showing distances to fixed points of reference
	width of the stream (measuring from ordinary high water to ordinary high water)
	location of existing and proposed non-vegetated or vegetated wetlands, bars, islands, riffle and pool
	complexes or other special aquatic sites at the project site
	complexes or other special aquatic sites at the project site shoreline, property lines, and location of adjacent property owners direction of flow
	direction of flow
	location & dimensions of bank stabilization structures
	Section Drawing (Prepare one drawing for the existing channel and one for the proposed channel)  existing and proposed stream channels including depth, base width and top width  dimensions and slope of bank stabilization structures
	filter cloth
	ordinary high water level
	existing contours of the bottom
	location and dimensions of low flow channel (if applicable)
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
1.	Provide the following:
•.	a) approximate normal flow rate and drainage area of the existing water body:  cfs square miles
	h) approximate normal flow rate and draining area of the new or modified water hade.
:	b) approximate normal flow rate and drainage area of the new or modified water body  cfs square miles
	c) method used to stabilize the banks:
	d) type & approximate composition percentage of the existing stream bed (e.g. cobble 35%, rock 45%, sand 20%, etc.):
2.	Will low flow channels be maintained? Yes No
3.	Will any structures be placed in the stream to create riffles, pools, meanders, etc? If "Yes" please explain.
	·
	·

## **APPENDIX O, Nontidal Stream Channel Modifications**

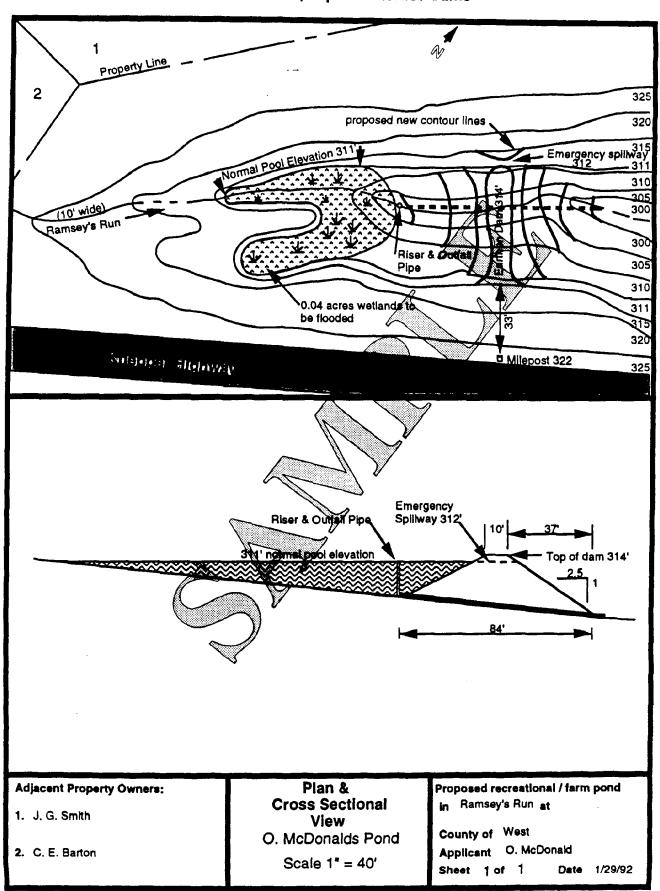


### APPENDIX P -- IMPOUNDMENTS/DAMS

## PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

	View Drawing
	_ north arrow
	waterway name
	existing and proposed structures
	dimensions of structure and benchmarks showing distances to fixed points of reference
	ordinary high water line
	location of vegetated wetlands at the project site
	shoreline, property lines, and location of adjacent property owners
	direction of flow
	width of the waterway (measuring from ordinary high water to ordinary high water
	_ risers
	emergency spillway, if applicable
Cross	s Section Drawing (Stream)
	base width and height of structure
	existing contours of the bottom
	normal pool elevation and design high and low water elevations, for dams with fluctuating water levels
	e.g. hydropower or water supply reservoirs) risers
	_ risers
	emergency spillway, if applicable
	<ul> <li>Vicinity Map Including the name of the map from which the vicinity map was taken and the exact location of the project site.</li> <li>map showing the area to be flooded (U.S.G.S. quad sheet or other topographic map is preferred).</li> </ul>
1.	Materials to be used for construction (earth, rock, concrete, etc.)?
2.	What will be the impoundment's: a) storage capacity: acre-feet b) surface area: acres
3.	What is the: a) current average flow? cfs b) proposed outflow? cfs c. will the impoundment structure be designed to pass a minimum flow at all times? Yes No If "Yes", what will be the minimum rate of flow? cfs
4.	What is the drainage area of the water body upstream of the proposed impoundment? square miles
5.	Does your project comply with State Dam Safety Criteria? Yes No If your answer is "No" or "Uncertain", contact the Bureau of Flood Plain Protection at telephone (804) 371-6095.
6.	a. What will be the area of waters or wetlands affected/flooded by the impoundment? acres
	b. How much of impoundment structure will be located on the stream bed? square feet
7.	Are fish ladders being proposed to accommodate the passage of fish? Yes No

## APPENDIX P, Impoundments / Dams

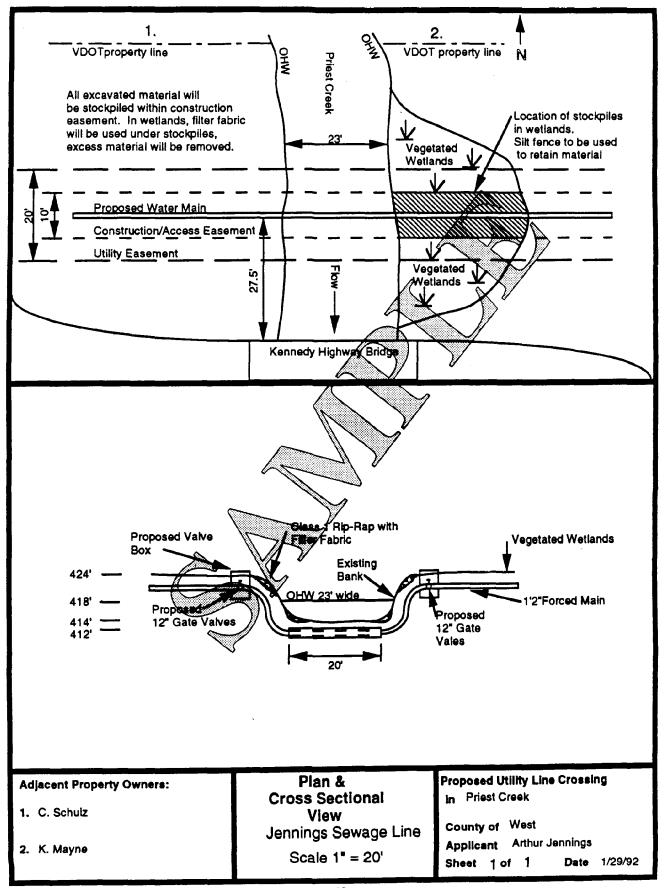


## APPENDIX Q -- UTILITY CROSSINGS

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

	View Drawing
	north arrow
	waterway name existing and proposed structures dimensions of structures and benchmarks showing distances to fixed points of reference mean low water and mean high water lines (tidal) ordinary high water line (nontidal) location of vegetated wetlands at the project site
	existing and proposed structures
	dimensions of structures and benchmarks showing distances to fixed points of reference
	mean low water and mean high water lines (tidal)
	ordinary high water line (nontidal)
	location of vegetated wetlands at the project site
	property mies on both sides of sucam with location of adjacent property owners
	width of the waterway (measuring from mean high water to mean high water (tidal) or ordinary high
	water to ordinary high water (nontidal)
	water to ordinary high water (nontidal)  ebb and flood (tidal) or direction of flow (nontidal)
	type and location of support structures (e.g. towers, poles, platforms)
	location of temporary stockpiles for excavated material (if applicable)
	location of temporary construction access
	location of temporary stockpiles for excavated material (if applicable) location of temporary construction access location of utility line/maintenance right of way
	100 miles of miles of management of manageme
Cmss	Section Drawing
	mean low water level (tidal)
	ordinary high water level (nontidal)
	existing contours of the bottom and bank
	_ calsuig contours of the contour and bank calsuige the water for every and errorsings
	vertical distance above mean high/mean low/ordinary high water for overhead crossings
	depth below stream bottom for submarine crossings
	distance that the structure will cross the waterbody relative to mean low water/ordinary high water
	Vicinity Map The name of the map from which the vicinity map was taken and the exact location of the project site must be included (U.S.G.S. quad sheet, street map, or county map is preferred).
1.	Describe the materials to be used and the method of construction in the order in which the construction will be accomplished:
2.	For overhead crossings, if there are overhead crossings or bridges in the area, how high are they relative to mean high/low water/ordinary high water?
3.	If the project is a power line crossing, what will be the nominal system voltage of the line?
4.	Will there be an excess of excavated material?YesNo If yes, please describe the method of transporting and disposing of the material
5.	What is the approximate drainage area and average stream flow? square miles cfs
6.	Will excess material be temporarily stockpiled in wetlands? Yes No If "Yes", will the stockpiled material be placed on filter fabric or some other type of impervious surface? Yes No

### **APPENDIX Q, Utility Crossings**

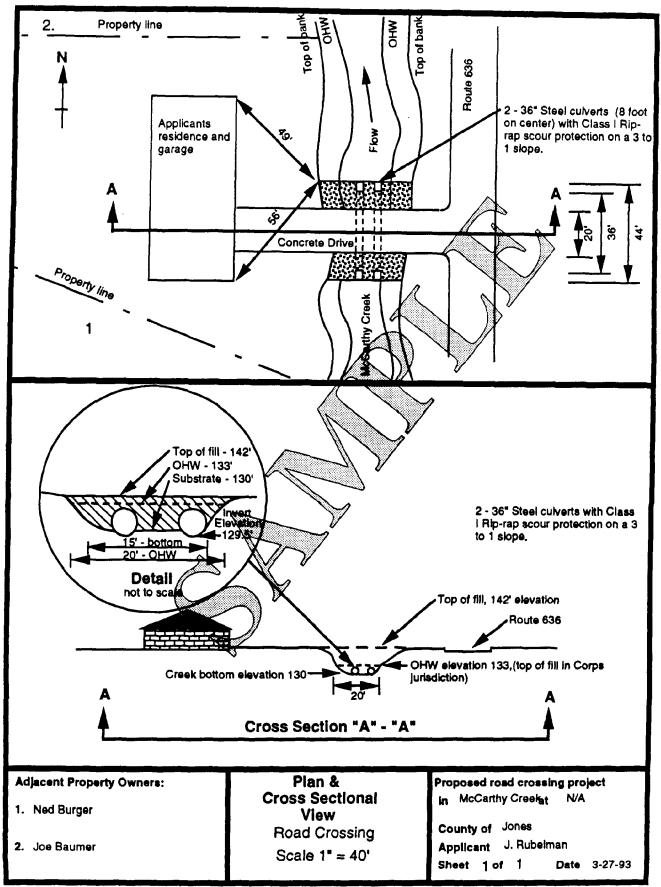


### APPENDIX R -- ROAD CROSSINGS

# PLEASE COMPLETE THE CHECKLIST AND ANSWER THE QUESTIONS. THE DRAWINGS MUST CONTAIN THE FOLLOWING INFORMATION OR THEY WILL BE RETURNED AS INCOMPLETE:

Plan V	iew Drawing						
	north arrow						
	waterway name						
	existing and proposed structures or fill						
	dimensions of structur	es and benchmarks showir	ig distances to fixed po	oints of reference			
	mean low water and n	ean high water lines (tidal)					
	ordinary high water lu	ne (nontidal)					
	location of vegetated v	vetlands at the project site	C 1'				
	property lines on both	ne (nontidal) vetlands at the project site sides of stream with locati (measuring from mean high	on of adjacent property	y owners	1.1		
	water to ordinary high	(measuring from mean nig	in water to mean high	water (tidal) or ordin	nary nign		
	ebb and flood (tidal)	r direction of flow (nontidated)	.1)				
	location and type of s	innort structures	u)				
	rocadon and type of s	pport ou uotates					
Cross	Section Drawing						
	mean high and low wa	iter levels levels (tidal)					
	ordinary high water le	vel (nontidal)					
	existing contours of the	e stream beds and bank	•••				
	dimensions relative to	he stream beds and bank mean high water or ordina plicable , if applicable	ry high water				
	neight of bridge, if ap	olicable of applicable					
	culverts (indicate size	i, ii applicable					
	cuiven inven elevano	18					
		e of the map from which the					
	: Virginia Department ceed 1 foot for all road	of Transportation (VDOT) s, culverts and bridges.	standards require that	the backwater for a 1	00 year storm		
1. the cor		scribe: the materials to be applished including cofferda		nstruction, and the o	rder in which		
2.	What is the approxim	ate drainage area and avera	ge flow rate of the stre	am? sq. mile	es cfs		
_	• •	-					
3.		cated on wetlands or subac					
	If your answer is yes,	indicate the square footage					
			Tidal	Nontidal			
		Vegetated wetlands	sf		sf		
		Non-vegetated wetlands					
		Subaqueous land	sf	<u> </u>	sf		
4.	Have you conducted !	nydrologic/hydraulic studie	s to ve <del>ri</del> fy adequacy of	f the culverts?			
₹.	Yes No	If your answer is "Yes", p	please attach a copy of	the study/report.			
		•					
5.	If the project is a brid above mean high/low	ge crossing and there are si water or ordinary high wa	milar crossings in the a ter for the other crossi	area, what is the vertings?	ical distance		

## **APPENDIX R, Road Crossings**



### AGENT CERTIFICATION OF AUTHORIZATION

I hereby certify that I have authoriz (APPLICANT'S NAME)	ed (AGENT'S NAME) to act on my behalf and
take all actions necessary to the processing, issuance, and ac special conditions attached.	ceptance of this permit and any and all standard and
We hereby certify that the information submitted in this appl knowledge.	ication is true and accurate to the best of our
APPLICANT'S SIGNATURE	AGENT'S SIGNATURE
DATE	DATE
Completion of this form will allow the agent to s Also, please provide the name(s) and complete as shown on your recorded deed.	

NAO FM 1022, 30 APR 93

### ADJACENT PROPERTY OWNER'S ACKNOWLEDGEMENT FORM

I, (ADJACENT PROPERTY OWNER'S NAM	ME PRINTED), own land next to or across the water from			
the land of (APPLICANT'S NAME)	I have reviewed the applicant's project drawings dated			
(DATE) to be submitted for all	necessary Local, State, and Federal permits.			
IHAVE NO COMMENTDO	NOT OBJECTDO OBJECT to the project.			
The applicant has agreed to contact me for add project.	ditional comments if the proposal changes prior to construction of the			
(Before signing this form, please be sure you have checked the appropriate box above.)				
ADJACENT PROPERTY OWNER'S SIGNATURE	DATE			
NOTE: IF YOU OBJECT TO THE PROPOS SUBMITTED TO VMRC IN WRITING. A	SAL - THE REASONS YOU OPPOSE THE PROJECT MUST BE AN OBJECTION WILL NOT NECESSARILY RESULT IN			
DENIAL OF THE PROJECT, BUT, VACONSIDERATION DURING THE PE	ALID COMPLAINTS WILL BE GIVEN FULL RMIT REVIEW PROCESS.			

NAO FM 1020, Rev 30 APR 93

NOTE: Please photocopy this form if additional copies are needed.

## APPLICANT'S AND CONTRACTOR'S ACKNOWLEDGEMENT FORM

I, (APPLICANT'S NAME)			IPANY NAME)
to perform the work described in the appl	lication signed and	dated	
We will read and abide by all conditions a project. We understand that failure to foll Local, State, and Federal statutes and that statutes. SEE FEDERAL PENALTI	low the conditions twe will be liable to	of the permits may const for any civil and/or crimin	itute a violation of applicable nal penalties imposed by these
In addition, we agree to make available a site to ensure permit compliance. If we farepresentative will have the option of stop signed and executed permit and are in full	ail to provide the a oping our operation	pplicable permit upon rec n until it has been determi	quest, we understand that the
APPLICANT'S SIGNATURE		DATE	_
CONTRACTOR'S SIGNATURE AND (if applicable)	TITLE	DATE	
CONTRACTOR'S NAME (PRINTED/T OR NAME OF FIRM	YPED)	CONTRACTOR'S OR	FIRM'S ADDRESS

NAO FM 1021, Rev 30 APR 93

FP

### Regulatory Agencies

Federal:

Fie

U. S. Army Corps of Engineers 803 Front Street Norfolk, Virginia 23510-1096 (804) 441-7652

The Corps of Engineers is responsible for administering a permit program pursuant to Section 10 of the Rivers & Harbors Act of 1899 and Section 404 of the Clean Water Act. Specifically, permits are required for construction, dredging, and filling activities proposed by landowners, businesses, developers, and government agencies in tidal and nontidal rivers, creeks, and tidal and nontidal wetlands. In evaluating projects, the Corps considers all comments received from the public and government agencies and conducts a public interest review that weighs foreseeable project benefits against foreseeable project detriments.

#### Field Offices:

Blackstone Field Office Post Office Box 109 Blackstone, Virginia 292-6617 (804) 292-6617

Christiansburg Field Office Tudor Square, Suite 9 209-211 Roanoke Street Christiansburg, Virginia 24073 (703) 382-6740

Dumfries Field Office Plaza South, Suite 102 138 Graham Park Road Dumfries, Virginia 22026 (703) 221-6967

Eastern Shore Field Office General Delivery Accomac, Virginia 23301 (804) 787-3133 Fredericksburg Field Office Breezewood Office Park 10703 Courthouse Road, #270 Fredericksburg, Virginia 22408 (703) 898-3568

Lynchburg Field Office Second Floor 7605 Timberlake Road Lynchburg, Virginia 24502 (804) 237-2145

Northern Neck Field Office Post Office Box 459 Lively, Virginia 22507 (804) 462-5382

Richmond Field Office Hanover Business Center 305-B Ashcake Road Ashland, Virginia 23005 (804) 752-7464/7484

State:

Virginia Marine Resources Commission Habitat Management Division Post Office Box 756 2600 Washington Avenue Newport News, Virginia 23607-0756 (804) 247-2200

The Virginia Marine Resources Commission serves the citizenry of the Commonwealth of Virginia by combining a public interest review process with effective management, regulation and protection of the State's marine fisheries, submerged lands (state wide) and coastal resources (tidal wetlands and coastal sand dunes/beaches). It is the goal of the Commission's Habitat Management Division to act as stewards of the Commonwealth's submerged lands and ensure the protection and wise use of these coastal lands and natural resources through the implementation of a regulatory review process and permitting program.

Department of Environmental Quality
Post Office Box 11143
Richmond, Virginia 23230-5000
(804) 527-5061

One branch of the Department of Environmental Quality, the Virginia Water Protection Program, is responsible for the administration of the water quality programs delegated to the Commonwealth under the Clean Water Act and as required by the State Water Control Law. Under both State and Federal Law, the Department functions as the principal water quality management agency within the Commonwealth of Virginia. The goal of the Virginia Water Protection Program is to ensure the protection of the beneficial uses of State waters including nontidal wetlands, prevent degradation of valuable water resources and to work toward the restoration of waters whose quality has been degraded. The Department issues permits for all activities which may result in the physical, biological or chemical alteration of State waters.

#### Resource Agencies

Federal:

U. S. Environmental Protection Agency
Wetlands Section
841 Chestnut Street 3ES42
Philadelphia, PA 19107
(215) 597-3360

The Environmental Protection Agency oversees compliance with federal environmental laws, including the Clean Water Act, the Clean Air Act, Superfund, the National Environmental Policy Act, etc. The Agency provides advice and recommendations to the Corps of Engineers to ensure that all authorized projects avoid and minimize adverse environmental impacts. Important features considered during Clean Water Act project reviews include but are not limited to impacts on water quality, flood storage, fisheries, and wildlife habitat.

U. S. Fish & Wildlife Service Virginia Field Office Post Office Box 480 Mid-County Centre, U. S. Route 17 White Marsh, Virginia 23183 (804) 693-6694

The objectives of the Department of the Interior and the U. S. Fish & Wildlife Service (Service) are to conserve fish and wildlife resources and their habitats and to protect public trust rights of use and enjoyment associated with waters of the United States. The Service provides advice and recommendations to the Corps of Engineers to ensure that all authorized projects are the least environmentally damaging alternative and in the public's interest in safeguarding fish and wildlife resources from unnecessary loss and degradation. The Service is also responsible for assisting the Corps to meet their responsibilities under Section 7 of the Endangered Species Act

National Marine Fisheries Service Management Division Oxford Laboratory Oxford, Maryland 21654 (301) 226-5771

President's Advisory Council on Historic Preservation
The Old Post Office Building
1100 Pennsylvania Avenue, Suite 809
Washington, DC 20004
(202) 786-0505

The President's Advisory Council on Historic Preservation (Council) provides comments to the Corps of Engineers (Corps) on undertakings that affect historic properties. The Council's goal is to accommodate historic preservation concerns with the needs of the Corps' Regulatory program through the Section 106 process. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies with jurisdiction over federally licensed undertakings to take into account the effects of their undertakings on historic properties (defined as districts, buildings, structures, or archaeological sites which are included on or are eligible for inclusion on the National Register of Historic Places) and to offer the Council the opportunity to comment on the project's effects. The Council encourages consideration of historic preservation concerns during the early planning stages of a project through consultation with the Corps, the State Historic Preservation Officer and other interested persons.

State:

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Virginia Department of Game & Inland Fisheries
Environmental Officer
Post Office Box 11104
Richmond, Virginia 23230-1104
(804) 367-8999

The Virginia Department of Game & Inland Fisheries (VDGIF) is the primary wildlife and freshwater management agency in the Commonwealth, and has legal jurisdiction over state or federally endangered or threatened species, excluding insects and plants. VDGIF is a consulting agency under the U.S. Fish & Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through the Virginia Marine Resources Commission, the Virginia State Water Control Board, the U.S. Army Corps of Engineers, the Federal Energy Regulatory Commission, and other state or federal agencies. The department's role in these procedures is to determine likely impacts on fish and wildlife resources and habitats, and to recommend appropriate measures to avoid, reduce, or mitigate for those impacts. Primary issues of concern to VDGIF include impacts upon upland, wetland, aquatic fish & wildlife and their habitats; protection of instream flow; endangered or threatened species; and impacts upon streams or other surface waters and interconnected groundwaters. Sediment and erosion control, water quality protection, and disposal or handling of hazardous or toxic materials are also of concern to the Department.

Virginia Institute of Marine Science Wetlands Section Gloucester Point, Virginia 23062 (804) 642-7000

The Wetlands Advisory Program of the Virginia Institute of Marine Science (VIMS) provides scientific and technical advice for the use of all participants in the shoreline permit process. To accomplish this, a written impact assessment report is prepared for most projects requiring a wetlands or subaqueous bed permit. The report describes the marine environmental impacts of the proposed activity and suggests alternatives and/or modifications which will lessen any significant adverse effects to aquatic resources resulting from the proposal. Copies of the advisory report are provided to the applicant and/or the agent and all regulatory/resource agencies.

Virginia Department of Conservation & Recreation
Division of Soil & Water Conservation
Shoreline Erosion Advisory Service (SEAS)
Post Office Box 1024
Gloucester Point, Virginia 23062
(804) 642-7121

The Shoreline Erosion Advisory Service is a technical section of the Department of Conservation & Recreation. The SEAS program provides technical advice regarding environmentally sound protective measures for shoreline erosion control. The SEAS service is available upon request to property owners throughout V(x) V(x)

Virginia Department of Historic Resources 221 Governor Street Richmond, Virginia 23219 (804) 786-3143

The Virginia Department of Historic Resources (VDHR) represents the interests of the Commonwealth and its citizens in preserving Virginia's cultural heritage. The director of the VDHR is the State Historic Preservation Officer (SHPO). The role of the SHPO is to assist the Corps in meeting its responsibilities under Section 106 of the National Historic Preservation Act. The VDHR assists the Corps with identifying historic properties, with assessing effects upon them and in considering alternatives to reduce, avoid or mitigate a project's adverse effects.

#### Local Regulatory Agencies (Wetlands Boards)

#### Soil & Water Conservation's Erosion & Sedimentation Control Offices

Abingdon 252 W. Main Street, Suite 3 Abingdon, Virginia 24210 (703) 676-5528

Dublin Post Office Box 1506 Dublin, Virginia 24084 (703) 831-4008

Staunton
Route 4, Box 99-J
Staunton, Virginia 24401
(703) 322-9991

Tappahannock Post Office Box 1425 Tappahannock, Virginia 22560 (804) 443-6752 Chase City 411 Boyd Street Chase City, Virginia 23924 (804) 372-2191

Richmond 217 Governor Street, 3rd Floor Richmond, Virginia 23219 (804) 371-7489

Suffolk 1548 Holland Road Suffolk, Virginia 23434 (804) 925-2468

Warrenton 98 Alexandria Pike, Suite 33 Warrenton, Virginia 22186 (703) 347-6420

These offices may be able to provide advice on erosion and sedimentation controls for shoreline and streambank erosion as well as storm water management.

#### FEDERAL WETLANDS DETERMINATIONS

Delineations are to be performed using the appropriate method as directed in the current Federal manual.

If you would like the Corps to verify a wetlands delineation, the following information should be provided:

A Plan View Drawing showing:

2:

all proposed development (if available) location of the wetlands at the site with benchmarks property lines and location of adjacent property owners existing structures at the site sampling locations location of wells (if applicable)

Please indicate whether the boundaries of the wetland at the project site have been flagged.

A Vicinity Map with the name of the map from which it was taken and the exact location of the project site should be included (U.S.G.S. quad sheet, or other topographic map is preferred).

In addition to the drawings, as much of the following information as possible should be provided.

Completed data sheets
Aerial photograph(s) of the site
Soil survey with soil descriptions
National Wetlands Inventory Map
FEMA map
Site history/Prior land use
Any other supporting documents to be considered

#### FEDERAL PENALTIES FOR VIOLATIONS AND RELATED STATE CODES

#### U. S. ARMY CORPS OF ENGINEERS

Section 10 of the Rivers and Harbors Act of March 1899 (33 U. S. C. 401, 403, & 404) - Penalties as provided by Section 12 of the Act (33 U. S. C. 406) are not less than \$500 or more than \$2,500 or 1 year imprisonment or both.

#### U. S. ARMY CORPS OF ENGINEERS & ENVIRONMENTAL PROTECTION AGENCY

Section 404 of the Clean Water Act (33 U. S. C. 1251 et seq.) - Criminal penalties are not less than \$2,500 per day or more than \$25,000 per day or up to 1 year imprisonment or both; after the first violation (conviction) not more than \$50,000 per day or up to 2 years imprisonment or both (33 U. S. C. 1319 (c) (1)). Civil penalties may be as much as \$25,000 for each day of violation 33 U. S. C. 1319 (d) and 33 U. S. C. 1344 (s) (4).

Injunctive Relief - Court order to remove, restore, or comply with other conditions.

False Statements - Falsifying information in the application may result in a maximum fine of \$20,000 or up to 6 months imprisonment or both.

The Environmental Protection Agency also has the authority to assess administrative penalties up to \$125,000 for violations of Section 404 of the Clean Water Act.

#### VIRGINIA MARINE RESOURCES COMMISSION

Title 28.2 of the Code of Virginia

Chapter 12 - Submerged Lands

Article 1 - Ownership & Uses of Submerged Lands

Article 2 - Enforcement & Penalties

Chapter 13 - Wetlands

Article 1 - General Provisions

Article 2 - Wetlands Zoning Ordinances & Wetlands Boards

Article 3 - Permits & Review

Article 4 - Enforcement & Penalties

Chapter 14 - Coastal Primary Sand Dunes & Beaches

Article 1 - General Provisions

Article 2 - Coastal Primary Sand Dune Ordinance & Boards

Article 3 - Permits & Review

Article 4 - Enforcement & Penalties

For violations under each Chapter civil charges up to \$10,000.00 may be assessed by the Commission or a local Wetlands Board, or civil penalties up to \$25,000.00, for each day of the violation, may be assessed by an appropriate circuit court.

#### DEPARTMENT OF ENVIRONMENTAL QUALITY

Chapter 3.1, Section 62.1-44, may assess civil penalties of up to \$25,000 per day, willful or negligent violations are punishable by not more than 12 months in jail and a fine of not less than \$2,500 or more than \$25,000. Persons convicted of a felony under this section is punishable by not less than 1 year, nor more than three years in jail, fines not less than \$5,000, nor more than \$50,000 for each violation. Should the felony involve imminent danger of death or serious bodily harm, it is punishable by not less than 2 years, nor more than 15 years in prison and a fine of not less than \$250,000. A defendant who is not an individual, convicted of this same felony shall be sentenced to pay a fine not exceeding the greater of \$1,000,000 or three times the economic benefit that would have been realized by the activity producing the offense.

#### PRIVACY ACT STATEMENT

The Department of the Army permit program is authorized by Section 10 of the Rivers and Harbors Act of 1899, Section 404 of the Clean Water Act, and Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972. These laws require that individuals obtain permits that authorize structures and work in or affecting navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters prior to undertaking the activity. Information provided in the joint permit application will be used in the permit review process and is a matter of public record once the application is filed. Disclosure of the requested information is voluntary; however, it may not be possible to evaluate the permit application or issue a permit if the information requested is not provided.

#### PROCESSING PROCEDURES

Concurrent processing - When your application is received by VMRC, an application number is assigned. This number will be used when referring to your project. Copies of the application will be forwarded to the regulatory agencies by VMRC. Because of differences in jurisdiction and laws, these agencies will perform separate but concurrent reviews of your project.

Site Inspections - Site inspections are necessary to evaluate proposals before, during, and after a permit is issued. Photographs of the project sight will be taken during the on-site evaluations. Failure to allow an authorized representative to enter or to take photographs of conditions at the project site may result in permit denial.

Joint State/Federal Public Notice - A Joint Public Notice may be used to advertise project plans. Comments received in response to the Public Notice are considered by each agency in reaching their individual decisions on the project. Certain types of projects may qualify for Corps general permits. In such cases, a joint public notice will not be prepared. The affected state and local agencies will then follow their individual regulations for advertising the project which may require publication in a local newspaper.

Commenting on Notices - Adjacent property owners and others who have expressed interest in a particular area are furnished a copy of the joint public notice. In addition, local and state agencies may place a public notice in the local newspaper. Anyone may comment on a public notice. Comments must be made in writing and received by the close of the comment period specified in the public notice.

Public Hearings - At the close of the Public Notice comment period Public Hearings may be held by Local, State, or Federal agencies. All applications requiring a local wetlands permit are considered at a public hearing held by the local wetlands board.

Purpose of Federal Hearings - The purpose of a Federal public hearing is to acquire information that is pertinent to the decision making process and cannot be obtained through other means.

Federal Hearing Procedures - Most projects usually affect only the applicant and the surrounding neighborhood. Very few projects require a public hearing. When a hearing is necessary, a 30 day public notice is sent out announcing the date, time and place of the hearing. A decision on the project will not be made at the hearing. A 10 day comment period follows the hearing to allow for additional facts or information to be submitted before the District Engineer makes a final decision.

State/Local Hearing Procedures - Projects affecting tidal wetlands will be heard by the appropriate Local Wetlands Board after a notice of Public Hearing has been advertised at least once a week for two consecutive weeks in a local newspaper. You should consult your local wetlands board to determine who bears the cost for this advertisement. VMRC will conduct the hearings for localities with no wetlands board.

Commission Meetings - Protested applications for a Virginia Marine Resources Commission permit which cannot be resolved, projects costing over \$50,000 involving encroachment upon or over State-owned subaqueous land, and all projects affecting State and local wetlands in localities without a wetlands board will be scheduled for Public Hearings by VMRC at their regularly scheduled monthly commission meetings. All interested parties will be officially notified regarding the date and time of the hearing, as well as informed of Commission meeting procedures. The Commission will make a decision on the project at the meeting unless a decision for continuance is made.

Joint Processing Meetings - Pending applications that do not meet the criteria of the Corps general permits are discussed at a joint processing meeting attended by representatives from the regulatory/advisory agencies. Project impacts as well as possible alternatives are discussed. These meetings are designed to reduce processing time by eliminating duplication of agency efforts.

Virginia Water Protection Permits - All applications and permits will be processed in accordance with the Virginia Water Protection Permit Regulations (VA 680-15-02) and with Procedural Rule No. 1.

Finalization of Process - If the project is approved, a permit is sent to the applicant. In some cases a notarized signature as well as processing fees and royalties are required before the permit is validated. If the project is denied, the reason(s) for denial will be provided in writing.

If you have questions about completing the application or drawings or on the permitting process, call any of the agencies listed on pages 51-54 of this guide.

#### MOST FREQUENTLY ASKED QUESTIONS

What is the U. S. Corps of Engineers and what do they do, and why? The Corps of Engineers is a branch of the U. S. Army. You may not realize that the Corps' responsibilities go far beyond bridge and dam building. Specifically, the Corps' Regulatory Branch is responsible for regulating construction, dredging, and filling activities in waters of the United States including tidal and nontidal wetlands. Congress charged the Corps with administering Section 10 of the Rivers and Harbors Act of 1899 which prohibits obstructing or altering navigable waters of the U. S. without a permit. In 1977, the Corps was also charged with administering Section 404 of the Clean Water Act which prohibits the unauthorized discharge of dredged or fill material into waters, including tidal and nontidal wetlands of the United States.

What are nationwide and regional permits? A nationwide permit is a form of general permit which authorizes certain activities throughout the nation in many cases without the property owner needing to notify the Corps provided certain conditions are met. However, an application may still be required for State review. A regional permit is a general permit issued by division or district engineers on a regional basis. The Norfolk District has issued regional permits for some 20 different activities.

How do I know if I need a permit? Any activity (structure, dredging, certain land clearing, filling, etc.) which obstructs, alters, or discharges fill into waters of the United States including tidal and nontidal wetlands may require a permit from the Corps, the Virginia Marine Resources Commission, the Virginia Department of Environmental Quality and or the local wetlands board. You may call the appropriate agency listed at the front of the joint application booklet for further guidance.

Will someone visit the site of my proposed project and tell me what is the best course of action? If you believe a site visit would assist you in developing your project plans, you may call the Corps.

What is the permit process? The permitting process begins with you. You complete a Joint Permit Application and send it to the Virginia Marine Resources Commission (VMRC). VMRC assigns an application number and sends copies of your application to DEQ, your local wetlands board and to the Corps. Projects not satisfying the requirements of a nationwide or regional permit may need to be advertised by public notice. The Corps is required to coordinate such applications with the Environmental Protection Agency, the U. S. Fish and Wildlife Service, and the National Marine Fisheries Service. The Corps considers the view of these agencies as well as comments received from the public in their evaluation of the project.

What are the penalties if I do not follow the permit process? The agencies are responsible for enforcing the regulations they administer. Reported or detected violations will be investigated. Should a violation be confirmed, appropriate action will be pursued. (See page 57 for specific Federal and State penalties.)

Where can I get further information about wetlands, wildlife, and the regulatory process? There are many sources. For information regarding wetlands, wildlife and the regulatory process you may contact any of the regulatory and advisory agencies listed on pages 51-54 of this booklet. The following agencies may also provide valuable information about aquatic resources, wetlands, wildlife and thier habitats:

Chesapeake Bay Local Assistance Department Environmental Protection Agency Wetlands Hotline 1-800-243-7229 (1-800-CHESBAY)

1-800-832-7828

As a reminder, your local wetlands board (mostly in tidal areas) or your local Soil & Water Conservation District my also provide assistance and advice on development in or affecting wetlands.

Does VMRC have jurisdiction in areas other than Tidewater? Yes, in State-owned submerged lands in nontidal areas. This includes all the beds of the bays, rivers and creeks not conveyed by special grant or compact according to law. All perennial streams may be under VMRC jurisdiction.

#### DEFINITIONS, SPECIAL TERMS, & ABBREVIATIONS

Acre - Foot Unit of volume of water that would cover one acre to a depth of one foot; equal to 43,560 cf. Adjacent Property Owner - Individuals owning property that shares the boundary (common property line) of the property at the project site.

Anadromous fish - Fish that swim upstream to spawn.

Beach Nourishment - The placement of suitable sand on a shore to restore and stabilize an eroding beach. Benchmark - A fixed point of reference used in a measure that under normal circumstances will not move or be changed. For example: the distance from the corner of a house to a telephone pole, or an official government survey marker.

**Breakwater** - A fixed or floating structure usually constructed parallel to the shoreline to protect the shoreline from erosion by reducing the wave energy that reaches the shore.

Bulkhead - an upright structure built to protect an eroding shoreline from the force of water.

Community Facility for Boat Moorings - A facility operating under public or private ownership which provides mooring for boats whether on a free, rental, or fee basis or for the convenience of a particular group of individuals.

Complete Application - The basic application, all applicable appendices, and drawings properly filled out and completed.

CFS -Cubic feet per second.

Cubic Yard - A measure of volume; length x width x depth = volume (27 cubic feet = 1 cubic yard).

Dredged Material - Material that is excavated or dredged from waters of the United States.

Estuarine - River systems that extend upstream to an imaginary line that closes the mouth of the river, bay or sound. Generally, the term estuary refers to the portion of the river from the ocean to the point where the ocean salts are diluted by freshwater from either river currents or upland runoff.

FPS - Feet per second.

Fill Material -Any material that will change the bottom elevation of an aquatic area, wetland, or water body.

Finger Pier - A small walkway generally built perpendicular to a pier for the purpose of providing access to and aid in mooring a boat. (Often referred to as a catwalk, L-head or T-head).

Filter Cloth - A thin cloth-like material normally used behind bulkheads or riprap to retain fill material while allowing water to pass through it.

General Permit -A Department of the Army (Corps) permit that is issued on a nationwide or regional basis for a category or categories of activities when the work is similar in nature and causes only minimal individual and cumulative environmental impacts.

Groin - A structure built perpendicular to the shore whose main function is to trap and retain moving sediments.

Intermittent Stream - A stream that has flowing water at some times and is dry at other times.

Intertidal Zone - The area of land that is submerged at high tide and exposed at low tide.

Jetty - A structure, much like a groin, that is built alongside a channel or harbor entrance to prevent sand from building up in the channel and obstructing navigation. Jetties are seldom low profile since their main purpose is to maintain a channel opening.

Joint Public Notice - A public notice that satisfies the advertising requirements of the Virginia State Water Control Board, the Virginia Marine Resources Commission, the Tennessee Valley Authority, and the Corps of Engineers.

Linear Feet - The total footage of a structure measuring in a continuous line along the structure.

Low Profile Groin - A groin design where the height of the structure is gradually lowered so the channelward end is below mean low water which allows sand to bypass the structure (once the structure is filled) so that beaches downdrift of the groin will still receive sand.

Marina - Any installation operating under public or private ownership which provides mooring (not including paddle or rowboats), sale, rental, equipment, supply, or service for the convenience of the public or their leases, renters, or users of their facilities.

Marsh Peat Surface - The surface of the area containing the roots of the wetland vegetation. Also referred to as the wetland substrate.

Mean High Water (MHW) - The average elevation of high water in tidal areas.

Mean High Water Line - A contour line on a drawing that shows the landward limits of an average high tide.

Mean Low Water (MLW) - The average elevation of low water in tidal areas.

Mean Low Water Line - A contour line on a drawing that shows the channelward limits of an average low tide.

**MGD** - Million gallons per day.

Mudflats - Nearly level areas without vegetation that are covered during high water and exposed at low water. Nationwide Permit - Nationwide permits are a type of general permit that authorize certain specified activities nationwide. If certain conditions are met, the specified activity may be undertaken without the need for an individual or regional permit.

Navigable Waters of the United States - Waters of the United States that are subject to the ebb and flow of the tide, and/or are presently used, or have been used in the past, or may be susceptible to use for the transport

of interstate or foreign commerce.

Nontidal Waters - Waterways or impoundments not subject to the periodic rise and fall of the tide.

Non-Vegetated Wetlands - State and Local Definition: The Commonwealth of Virginia has defined these areas as follows: Non-vegetated wetlands include the land lying between and contiguous to mean low water to an elevation of mean high water not otherwise considered "vegetated wetlands". Generally, this is any area between mean low water and mean high water which does not exhibit or support vegetation. These areas include mudflats, sand beaches, eroding shorelines, etc.

Ordinary High Water (OHW) - The average elevation of high water in nontidal areas.

Ordinary High Water Line - A contour line on maps of nontidal waterfront property that shows the landward limits of normal high water.

**Perennial Stream** - A stream that has flowing water year round and is usually indicated by a solid blue line on U.S.G.S. quadrangle maps.

**Pre-Discharge Notification (PDN)** - Notification required by the Corps of Engineers on specific projects that may meet the criteria of certain Nationwide Permits.

Put & Take Trout Waters - Cool, clear, freshwater streams that are stocked with various species of trout.

Regional Permit - Regional permits are a type of General Permit that may be issued by a division or district engineer for activities within a specific geographic area.

Retaining wall - An upright structure built to prevent property from slumping into a waterway.

Revetment - A facing, usually made of stone or concrete, installed to protect an eroding shoreline from the force of water.

**Riparian Rights** - The rights of a person owning land bordering on a water body to reach navigable water. **Riprap** - A layer of material such as stone or chunks of concrete on an embankment slope to prevent erosion. **Splash Apron** - A structure that is usually made of riprap or concrete and placed at the outlet of a pipe to absorb the initial impact of the flow and reduce the flow velocity to a level which will not erode the receiving channel or area.

**Spur** - A short structure, normally less than 20 feet in length, built perpendicular to a groin for the purpose of reducing erosion or scour downdrift of the groin.

Square Feet - A measurement of area (length x width = area),

State Waters - All water, on the surface and under the ground, wholly or partially within its jurisdiction.

Subaqueous Land - Land which is submerged below mean low water (channelward of the mean low water line) in tidal areas or below ordinary high water (channelward of the ordinary high water line) in nontidal areas.

Tidal Waters - Waters subject to a periodic rise and fall in elevation caused by the moon and sun and occurring in a cyclic manner, normally every 12 hours.

Trout waters - Cool, clear, freshwater streams that provide habitat for various species of trout. Trout cannot survive in waters warmer than 68 degrees.

Vegetated Shallows - Shallow water areas that support submerged aquatic vegetation.

Vegetated Wetlands - State and Local Definition: The Commonwealth of Virginia has defined these areas as follows: Vegetated wetlands include the land lying between and contiguous to mean low water to an elevation above mean low water equal to one and one-half times the mean tide range at the site of the proposed project and upon which one or more species of tidal wetland plants is growing. Generally, this is the land between and adjacent to the range of mean high water and mean low water which supports at least one species of wetland vegetation. This definition includes the land within one and one-half times the range of the average tide at the site. State and Local wetlands are limited to tidal areas of the commonwealth.

Federal Definition - The Government of the United States has defined wetlands as follows: Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Federal wetlands generally include swamps, marshes, bogs, and similar areas. It should be noted in many cases the federal definition of wetlands includes areas at higher elevation than one and one-half times the mean high tide range. Federal wetlands are not limited to tidal areas.

**Vernal Pools** - Pools that may only seasonally have standing water. Several endangered species are dependant on vernal pools for their reproduction and continued existence.

Waters of the United States - Coastal (including territorial seas) and inland waters, lakes, rivers, and streams that are navigable waters of the United States, including adjacent wetlands. PLUS: Tributaries to navigable waters of the United States, including adjacent wetlands. (Man-made, nontidal drainage and irrigation ditches excavated from dry land, not from wetlands, are not considered to be tributaries.) PLUS: Interstate waters and their tributaries, including adjacent wetlands.



# CERTIFICATE OF COMPLIANCE WITH ARMY CORPS OF ENGINEERS, NORFOLK DISTRICT REGIONAL PERMIT RP-17 FOR PRIVATE PIERS

I,	, hereby certify that I have read and understand all
conditions of the effective Regi	onal Permit RP-17, issued by the Army Corps of Engineers,
Norfolk District, Norfolk, Virg	inia, regulating the construction, maintenance, and repair of
private, non-commercial piers	& mooring piles in certain navigable waters of the United States
within the Commonwealth of	Virginia. The proposed (work) to be located at:
fully complies with all condition	
any regulatory representative a fail to provide the required do will have the option of stoppir	y of this certification and any other documents required by RP-17 to authorized to visit the project site to ensure permit compliance. If I ocumentation upon request, I understand that the representative ag work at the project site until it has been determined that I am in and conditions set forth in the regional permit.
Sign	ature of Property Owner or Agent
	 Date

NOTE: DO NOT SIGN THIS FORM IF YOU ARE CONSTRUCTING A BULKHEAD, RIPRAP REVETMENT, OR PERFORMING ANY OTHER ACTIVITY NOT COVERED BY RP-17. DO NOT SIGN THIS FORM IF YOU HAVE NOT READ THE TERMS AND CONDITIONS OF RP-17. YOU MAY CONTACT THE CORPS AT (804) 441-7652 FOR A COPY OF THE PERMIT.

NAO FL 17 Rev 30 APR 93

#### ADDENDUM

## DEPARTMENT OF ENVIRONMENTAL QUALITY ADDITIONAL INFORMATION FOR VIRGINIA WATER PROTECTION PERMITS

The following information is required for all applications unless otherwise noted:

1. § 62.1-44.15:3 of State Water Control Law requires that before the Department may consider any application for a permit to be complete, that the applicant provide the Executive Director with a notification from the local governing body of the county, city or town in which the discharge is to take place that the location and operation of the facility is fully consistent with all ordinances adopted pursuant to Chapter 11 (§ 15.1-427 et seq.) of Title 15.1. A form for local government signature is included with this appendix. Please note that the local governing body must be presented with the Joint Permit Application. Failure to fulfill this requirement will prevent processing of your application and may result in the administrative denial of your request.

2.	3.
Latitude:	Hydrologic
Longitude:	Unit Code (HUC) :
* This information is found on the <u>Hydrologi</u>	c Unit Map - State of Virginia published by the U.S. Geological survey.
4. Stream Classification (Check one	e) :
Class I - Open Ocean	Class II - Estuarine Waters
Class III - Nontidal Waters	Class IV - Mountainous Zone Waters
Class V - Put & Take Trout	Class VI - Natural Trout
Waters	Waters
Class VII - Swamp Waters	
5. Stream Drainage Area (check wa<1 square mile b<5 square	<b>★ 4</b>
**Note: Applicants proposing impoundments information (see section 11)	s and water withdrawals may be required to provide more detailed hydrologic
6. Existing beneficial uses of affect	ed waters (check all that apply)***:
fish and wildlife habitat	recreation
public water supply	agriculture water supply
commercial/industrial supply	waste assimilation
navigation	cultural value
aesthetic value	other (please describe)
7. Uses which may be impacted by t	the proposed project (check only those uses impacted) ***:
fish and wildlife habitat	recreation
public water supply	agriculture water supply
commercial/industrial supply	
navigation	cultural value
aesthetic value	other (please describe)
***Note: More detailed information on benefi	icial uses may be required for specific projects. Applicants will be notified, in

\*\*\*Note: More detailed information on beneficial uses may be required for specific projects. Applicants will be notified, in writing, of any additional requirements.

#### 8. Functional values assessment (wetlands only):

Functional assessments are required for impacts (permanent and temporary) to all wetlands one acre or more in size. Many recognized functional assessment methodologies exist. However, the DEQ endorses no specific methodology at this time. It is suggested that an applicant or his agent select a method based upon its ease of use, ability to provide quality information, and utility in the field. Applicants are cautioned that the assessment of wetland functional value is technically complex. Persons unfamiliar with the techniques for functional assessment should use caution when attempting to utilize these methods. The functional assessment and the methodology utilized to determine functional value must be submitted to the DEQ with the application package.

#### 9. Wetland delineation (where applicable):

All projects impacting wetlands must provide a delineation map showing the physical location and aerial extent of all wetlands on the site. All data sheets and calculations utilized to determine an area's wetland status shall be submitted with the delineation map. The currently accepted federal methodology shall be used in preparing wetland delineations.

10. Mitigation Plan (required for unavoidable wetland losses and stream modifications):

The mitigation plan shall at a minimum include:

a. Measures taken to avoid impacts to surface waters, including wetlands.

Example 1: Structures were relocated to avoid wetland/stream relocation area's identified at X and Y on the delineation map.

Example 2: The road crossing structure has been changed from a quadruple box culvert to a bridge in order to avoid fill and channel modifications in Jones Branch, a sensitive trout stream.

b. Where impacts could not be avoided, measures taken to reduce impacts to surface waters, including wetlands.

Example 1: The slope of the road fill was reduced to x resulting in a reduction of y in wetland area impacted.

<u>Example 2:</u> The bridge was realigned to reduce the amount of channelization necessary to accommodate the road crossing.

- c. Where impacts could not be avoided or minimized, a mitigation plan which completely describes the type of impact to be mitigated and the means by which mitigation will be accomplished. Plans should include:
- \* Location of the mitigation site, including latitude and longitude at the center of the site.
- \* detailed sketches and site plans
- \* any other measures designed to re-create, enhance or restore impacted beneficial uses within the proposed mitigation area.

If no replacement mitigation is planned, the applicant must include a brief statement to this effect and include a detailed explanation as to the reason no replacement mitigation is planned.

\*\*\*\* Note: Applicants with projects involving a water withdrawal or a FERC hydropower licensing or relicensing are required to provide the information in items 11 through 19.

11. Applicants must complete Appendix N - Stream Intakes and Outfall Structures, Appendix O - Stream Channel Modifications and/or Appendix P - Impoundments/Dams, whichever is (are) appropriate.

Median Flow

the return flow.

12. What are the median monthly stream flows in cubic feet per second (cfs) at the water intake or dam site?

Median Flow

<b>Month</b>	(CFS)	Month	(CFS)	
period of record	that was used to calcu	JUL AUG SEP OCT NOV DEC t the streamflow gau		vs
provided in Appe	endices N, O and P.		Ţ.	
	e? Specify the units of		maximum daily withdrawal at the water million gallons per day, gallons per minute	,
Maximum	instantaneous with	drawal		
Maximum	daily withdrawal		Shidhada an ann an Ann an an ann an Ann an a	
	manner in which the var, or time of day, or time		varies over time, for example, as a function	n

17. Describe below or in a separate attachment how the amount of water to be withdrawn was calculated and any relevant assumptions made in that calculation. Also describe the proposed use of the water withdrawal.

16. Describe below the amount of water that will be lost to consumptive use. For the purpose of this application, consumptive use means the withdrawal of surface waters without recycle of said waters to their source or basin of origin. Attach a map showing the location of the withdrawal and location of


- 18. Describe in an attachment the existing beneficial uses of the surface water body near the proposed project site that would be affected by the withdrawal of water. Include both instream and offstream uses. For the purposes of this application beneficial instream uses include, but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation and cultural and aesthetic values. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural, hydropower, commercial and industrial uses. Describe the streamflow necessary to protect existing beneficial uses and how the proposed withdrawal will impact existing beneficial uses.
- 19. Describe in an attachment the aquatic life known to be present at the proposed location that will be impacted by the proposed withdrawal. Include information on the species known to be present and their habitat requirements.

TO:

a, č

Applicants For Virginia Pollutant Discharge Elimination System (VPDES) Permits, Virginia Pollution Abatement (VPA) Permits, Virginia Corrective Action Plan (CAP) Permits and Virginia Water Protection Permits.

Article 2, § 62.1-44.15:3 of the State Water Control Law states:

"No application for a Certificate to discharge sewage, industrial wastes and other wastes into or adjacent to state waters shall be considered complete unless the applicant has provided the Executive Director with notification from the governing body of the county, city or town in which the discharge is to take place that the location and operation of the discharging facility is consistent with all ordinances adopted pursuant to Chapter 11 (§ 15.1-427 et seq.) of Title 15.1 of the Code."

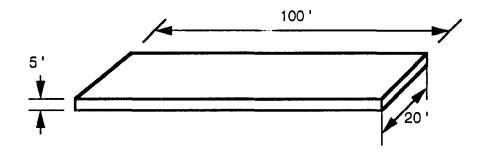
(These are local zoning and planning ordinances)

In accordance with this section, new applications for VPA permits, VPDES Permits, CAP Permits and Virginia Water Protection Permits will not be considered complete until the information below is submitted to the DEQ Regional Office or Headquarters Office in the case of the Virginia Water Protection Permits.

Protection F	<del>-</del>	rice in the case of the virginia water
To:	ounty, City or Town Adn	unistrator/Manager)
certificate. of the Code below certif	In accordance with Cof Virginia, I request	a DEQ application form for a permit or hapter 11 (§15.1-427 et seq.) of Title 15.1 that you sign one of the two statements cation is consistent with your local rm to:
Return to:	(Applicant's Name)	
	(Applicant's Address	)
seq.) of Tit	(1) that the proposent with all ordinances the 15.1 of the Code of the nat no local ordinances	eed location and operation of the facility adopted pursuant to Chapter 11 (§15.1-427 et Virginia or are in effect pursuant to Chapter 11
Si	gnature	Title
Pr	int name	Date

## How to calculate square feet, cubic feet and cubic yards:

If you wanted to dredge a channel 100 feet long, 20 feet wide and 5 feet deeper than the existing channel is at mean low water, the volume you dredge would look similar to the illustration below.



Using steps 1 - 3 below, the calculations for this example are:

- 1.  $100 \text{ feet} \times 20 \text{ feet} = 2,000 \text{ square feet}$
- 2. 5 feet x 2,000 feet = 10,000 cubic feet
- 3. 10,000 cubic feet /27 = 370 cubic yards





Permit # \_\_\_\_\_

## Commonwealth of Virginia Marine Resources Commission Authorization

	(Name)
	(Address)
rmit Authorizes :	
suance Date	, Expiration Date
	(Commissioner or Designee)
	(Notary Public)
	(Commission Expires)

This Notice Must Be Conspicuously Displayed At Site Of Work.

EXHIBIT D

Virginia Marine Resources Commission Habitat Management Division 2600 Washington Avenue Post Office Box 756 Newport News VA 23607-0756

ntion:	Enviro	nmental Eng	gineer			
	4			Tage to the same to t		
٠						
Sir/Mada	am:					
		advised that I	T will comm	ence work on	<b>1</b>	
		advised that i	T will comm	ence work on	(Permi	t Number
Sir/Madd	lease be a	advised that i	r will comm	ence work on	(Permi	t Number
	lease be a in	advised that i			(Permi	t Number
P.	lease be a		)	(City)	(Permi (County)	
P.	lease be a	(Waterway	)	(City)	(Permi (County)	t Number
P.	lease be a	(Waterway	)	(City)	(Permi (County)	

\*\* Note: Return postage is on the card.

EXHIBIT E



WILLIAM A. PRUITT

Commissioner ROBERT D. CRAFT Chief, Administration and Finance ROBERT W GRABB Chief, Habitat Management ROBERT J. MARKLAND Chief, Law Enforcement JACK G. TRAVELSTEAD Chief, Fisheries Management

## COMMONWEALTH of VIRGINIA

Marine Resources Commission

P. O. Box 756

2600 Washington Avenue Newport News, Virginia 23607-0756

October 15, 1993

ASSOCIATE MEMBERS

SIDNEY H. CAMDEN Eastville, Virginia GEORGE S. FORREST Poquoson, Virginia JOHN W. FREEMAN, SR. Hampton, Virginia TIMOTHY G. HAYES Richmond, Virginia WILLIAM A. HUDNALL Heathsville, Virginia DONALD L. LIVERMAN, SR. Virginia Beach, Virginia PETER W. ROWE Chesapeake, Virginia JANE C. WEBB Newport News, Virginia

Mr. Mark A. Bruner c/o Tidewater Dock, Inc. P. O. Box 2733 Virginia Beach, Va. 23450

RE: VMRC #93-1056

Dear Sir:

Enclosed is the Marine Resources Commission permit to install 233 linear feet of riprap revetment no more than three feet channelward of mean low water at property situated along Linkhorn Bay in Virginia Beach.

A yellow placard is also enclosed. This placard reflects the authorized activities for inspection purposes and must be conspicuously displayed at the work site throughout the construction phase. Failure to properly post the placard in a prominent location will be considered a violation of your permit conditions.

The work authorized by this permit is to be completed by October 31, 1996. Please note that in conformance with Special Condition 17 of your permit you are to notify the Commission prior to commencement of your permitted project. The enclosed self-addressed, stamped post card is to be used for this purpose. All other conditions of the permit will remain in effect.

Please be advised that you may also require issuance of a U. S. Army Corps of Engineers permit before you begin work on this project. You may wish to contact them directly to verify any permitting requirements.

Sincerely,

Ŕobert W. Grabb

Chief, Habitat Management

RWG/lm

MH

Enclosure

U. S. Army Corps of Engineers, Norfolk District Virginia Beach Wetlands Board Applicant

MRC 30 - 317

VMRC#	93-10	056		
	Mark	Α.	Bruner	

## COMMONWEALTH OF VIRGINIA MARINE RESOURCES COMMISSION PERMIT

The Commonwealth of Virginia; M	(arine Resources Commission, hereinafter referred to as the Commission, on this $5 t h$ day of $0 t c   t b   t e   t$
199 3, hereby grants unto:	Mark A. Bruner
	1537 Quail Point Road
	Virginia Boach VA 23/5/

hereinafter referred to as the Permittee, permission to:

	Encroach in, on, or over State-owned subaqueous bottoms pursuant to Chapter 12, Subtitle III, of Title 28.2 of the Code of Virginia.	
	Use or develop tidal wetlands pursuant to Chapter 13, Subtitle III, of Title 28.2 of the Code of Virginia.	
thar	nereby authorized to: install 233 linear feet of riprap revetment no more in three feet channelward of mean low water at property situated ing Linkhorn Bay in Virginia Beach.	•

All activities authorized herein shall be accomplished in conformance with plans and drawings dated September 23, 1993, which are attached and made a part of this permit.

This permit is granted subject to the following conditions:

- (1) The work authorized by this permit shall be completed by October 31, 1996. The Permittee shall notify the Commission when the project is completed. The completion date may be extended by the Commission in its discretion. Any such application for extension of time shall be in writing prior to the above completion date and shall specify the reason for such extension and the expected date of completion of construction. All other conditions remain in effect until revoked by the Commission or the General Assembly.
- (2) This permit grants no authority to the Permittee to encroach upon the property rights, including riparian rights of others.
- (3) The duly authorized agents of the Commission shall have the right to enter upon the premises at reasonable times, for the purpose of inspecting the work being done pursuant to this permit.
- (4) The Permittee shall comply with the water quality standards as established by the Virginia Water Control Board and all other applicable laws, ordinances, rules and regulations affecting the conduct of the project. The granting of this permit shall not relieve the Permittee of the responsibility of obtaining any and all other permits or authority for the projects.
- (5) This permit shall not be transferred without written consent of the Commissioner.
- (6) This permit shall not affect or interfere with the right vouchsafed to the people of Virginia concerning fishing, fowling and the catching of and taking of oysters and other shellfish in and from the bottom of acres and waters not included within the terms of this permit.
- (7) The Permittee shall, to the greatest extent practicable, minimize the adverse effects of the project upon adjacent properties and wetlands and upon the natural resources of the Commonwealth.
- (8) This permit may be revoked at any time by the Commission upon the failure of the Permittee to comply with any of the terms and conditions hereof or at the will of the General Assembly of Virginia.
- (9) There is expressly excluded from the permit any portion of the waters within the boundaries of the Baylor Survey.
- (10) This permit is subject to any lease of oyster planting ground in effect on the date of this permit. Nothing in this permit shall be construed as allowing the Permittee to encroach on any lease without the consent of the leaseholder. The Permittee shall be liable for any damages to such lease.
- (11) The issuance of this permit does not confer upon the Permittee any interest or title to the beds of the waters.
- (12) All structures authorized by this permit which are not maintained in good repair shall be completely removed from State-owned bottom within three (3) months after notification by the Commission.
- (13) The Permittee agrees to comply with all of the terms and conditions as set forth in this permit and that the project will be accomplished within the boundaries as outlined in the plans attached hereto. Any encroachment beyond the limits of this permit shall constitute a Class 1 misdemeanor.
- (14) This permit authorizes no claim to archaeological artifacts which may be encountered during the course of construction. If, however, archaeological remains are encountered, the Permittee agrees to notify the Commission, who will, in turn notify the Department of Historic Resources.

  The Permittee further agrees to cooperate with agencies of the Commonwealth in the recovery of archaeological remains if deemed necessary.
- (15) The Permittee agrees to indemnify and save harmless the Commonwealth of Virginia from any liability arising from the establishment, operation or maintenance of said project.

: following special conditions are imposed on this permit:

- 16. The yellow placard accompanying this permit document <u>must</u> be conspicuously displayed at the work site throughout the construction phase of the authorized activity.
- 17. Permittee agrees to notify the Commission a minimum of 15 days prior to the start of construction of the activities authorized by this permit.

ĝ Š		VMRC # 93-1056
A permit issuing fee of	\$25.00	
and a royalty of	n/a	
for the	installatio	on of 233 linear feet of riprap revetment
for a total of $1\ 2^{\text{sheets.}}$	\$25.00	is due and payable upon return of this document signed by the Permittee. This permit consists o
PERMITTEE		
	fixed hereto as evidence of	acceptance of all of the terms and conditions herein.
		ncy or political jurisdiction, please assure that the individual who signs for the Permittee has proper at and performance obligations which result from activity authorized by this permit.
11th day of Cictabea	, 169 3	Accepted for Mark A. Bruner  By Man A Druner
State of Vugue		(Name) (Title)
City (or County) of Ches		, to-wit: a Notary Public in and for said City (or County) and State hereby certify tha
Thach a	. Burec	Permittee, whose name is signed to the foregoing, has acknowledged the same
before me in my City (or Cou	Given	under my hand this 11th day of No. Fa. W. 1993
	My commission	n expires on the 31 st day of Yuly .1994.
COMMISSION		
	the Commonwealth of Virgin W. Grabb	nia, Marine Resources Commission has caused these presents to be executed in its behalf by Chief, Habitat Management
	(Name)	(Title) MARINE RESOURCES COMMISSION
th day of October	e 19 93	By
State of Virginia City of Newport 1 Linda L.		, to-wit:
Robert W.	. Grabb	a Notary public within and for said City, State of Virginia, hereby certify that also be represented to the foregoing, bearing the $5{ m th}$ day of $0{ m ctober}$ $_{19}93$ , has
acknowledged the same bef		i.
Given under my hand this	15th <sub>day of</sub> Octob	ber 19 93  Notary Public And A Massac
My commission expires on to	<sup>he</sup> 31st <sup>day of</sup> Ma	arch 19 96

PERMITTEE—WHITE COPY COMMISSION—YELLOW COPY CORPS OF ENGINEERS—PINK COPY JOB SITE

MARK A. BRUNER

1537 QUAIL POINT RD.

VIRGINIA BEACH, VA

23454



PROJECT 93-(056-(0)

SCALE: 1" = 2,000' in obeved seet m

PURPOSE: EROSION CONTROL

DATUM: M.L.W. 0.00 ADJACENT PROPERTY OWNERS:

1) GRAY N. TURNER

2) DAVID H. ADAMS

ADC'S STREET MAP OF TIDEWATER VIRGINIA MAP 14 GRID BLOCK C-7

PROPOSED SHORELINE PROTECTION

Travelor read Services Center

IN: LINKHORN BAY

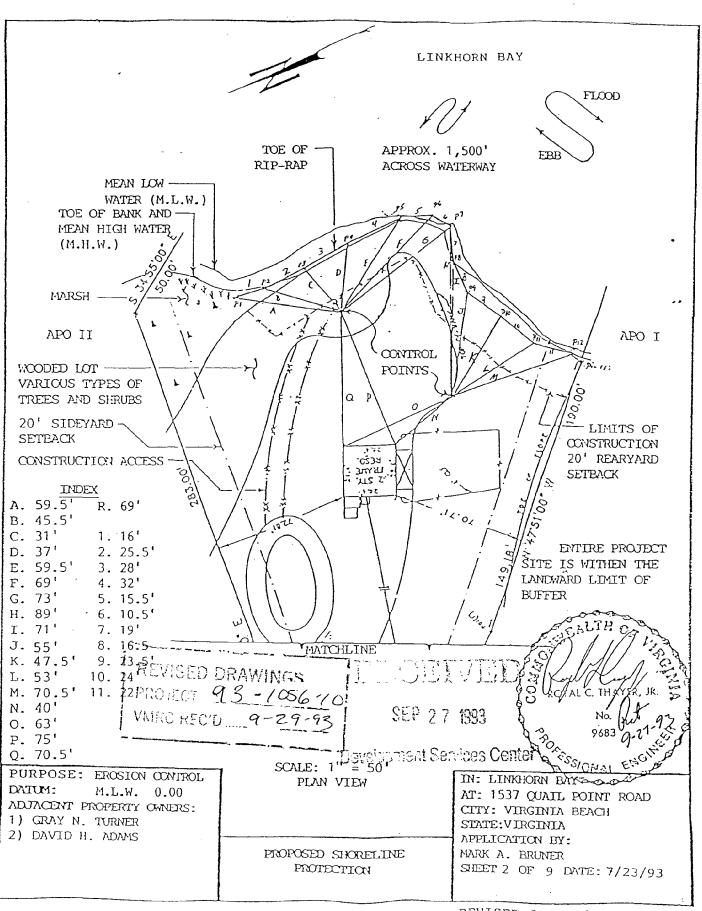
AT: 1537 QUAIL POINT ROAD

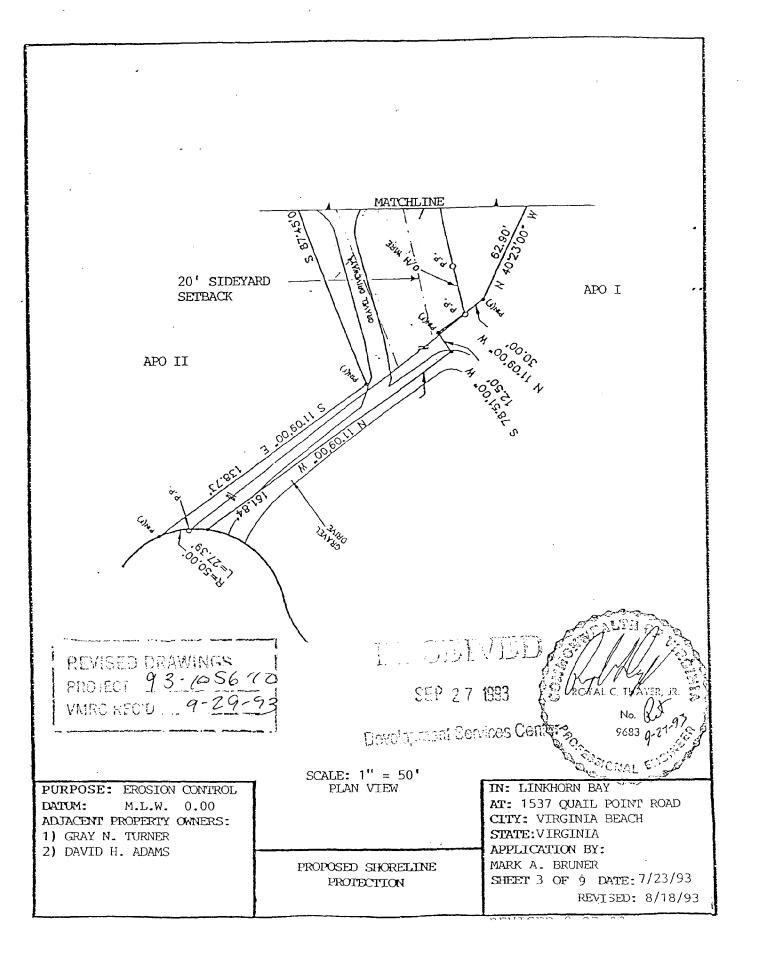
CITY: VIRGINIA BEACH

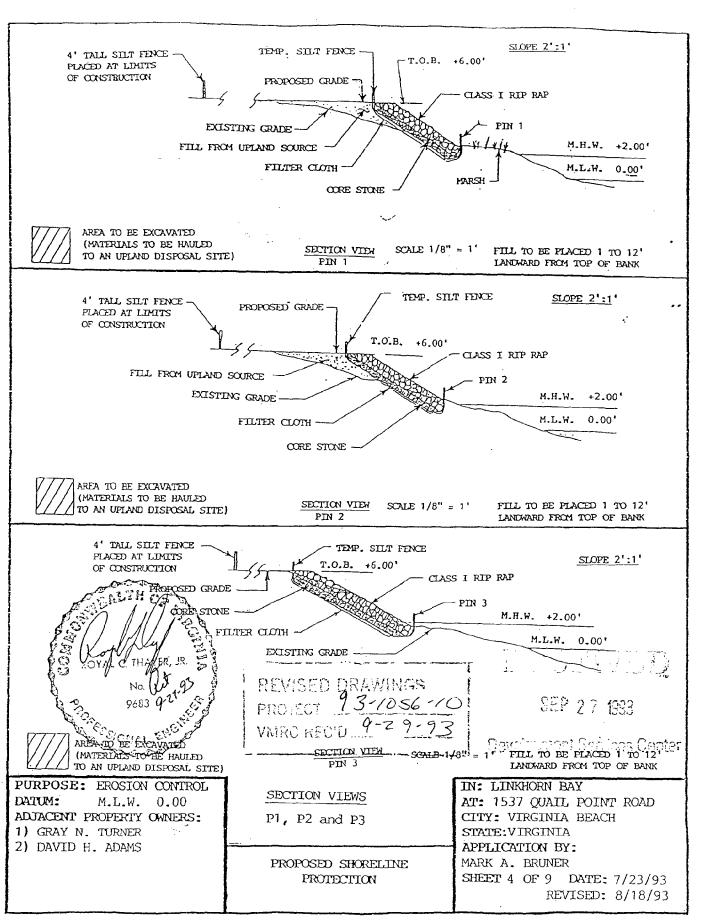
STATE: VIRGINIA APPLICATION BY: MARK A. BRUNER

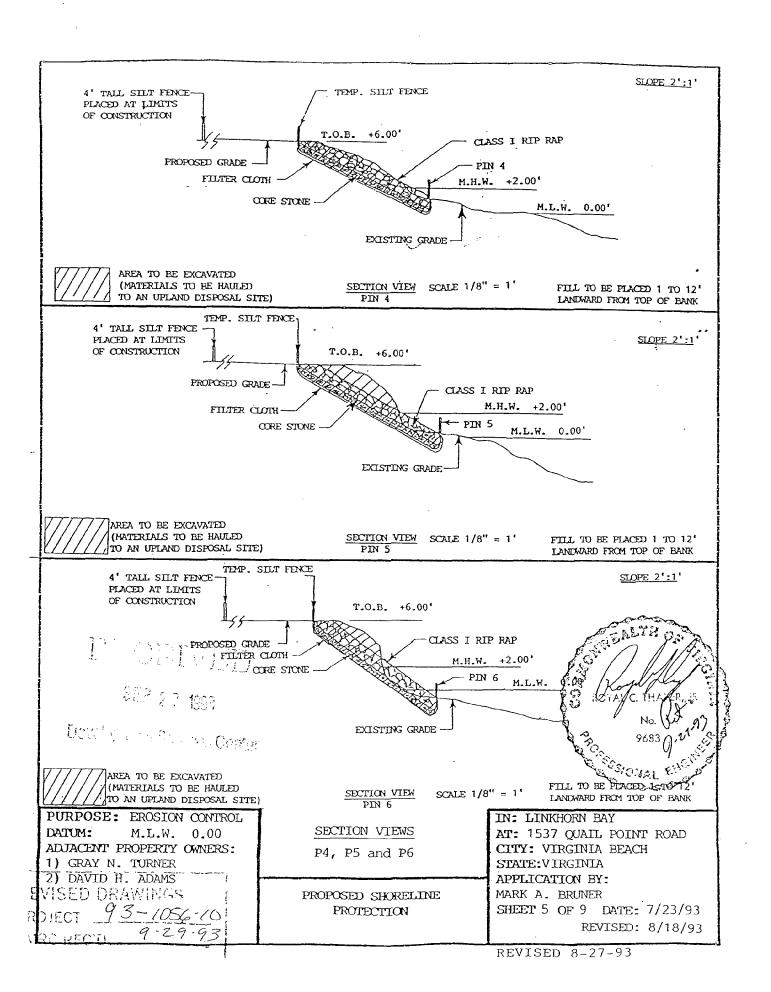
SHEET 1 OF 9 DATE:7/23/93

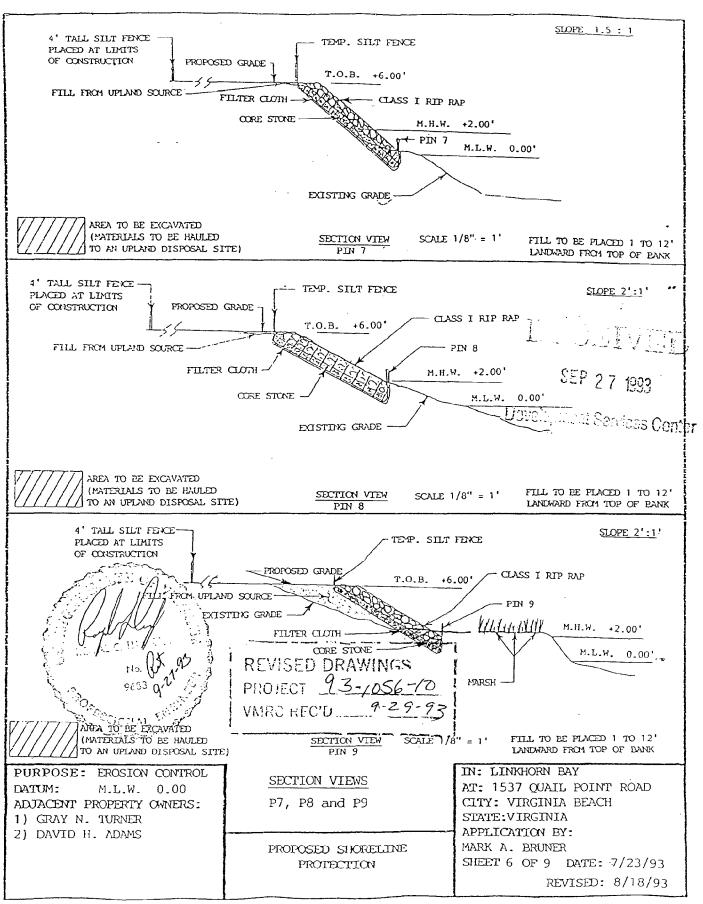
REVISED: 8/18/93

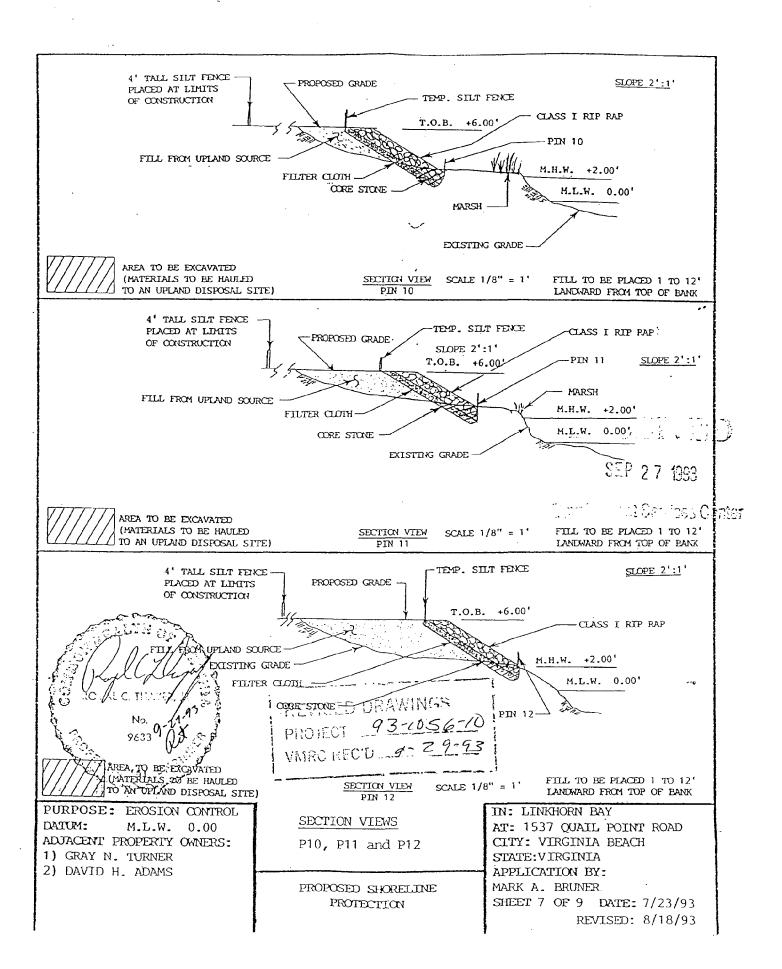












### GENERAL NOTES:

- 1) A 4' TALL SILT FENCE WILL BE PLACED AND MAINTAINED ALONG ALL ACCESSWAYS PRIOR TO THE START OF ANY CONSTRUCTION.
- 2) TREES THAT ARE TO BE REMOVED ARE TAGGED WITH PINK SURVEY RIBBON.
- 3) SAND FILL TO BE FROM UPLAND SOURCE.
- 4) ALL DISTURBED AREAS TO BE TOPSOILED AND SEEDED.
- 5) A SILT FENCE WILL INSTALLED AT THE TOP OF BANK, AND MAINTAINED UNTILL A PERENNIAL VEGETATIVE COVER IS ESTABLISHED.
- 6) ALL MATERIAL IS TO BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMENDATIONS.

#### SEQUENCE OF EVENTS:

1)	INSTALL A 4' TALL SILT FENCE ALONG ACCESSWAYS	1	DAY
2)	REMOVE DEBRIS FROM SHORELINE	4	DAYS
3)	REMOVE TAGGED TREES	2	DAYS
4)	EXCAVATE TOE-IN-TRENCH AND RESHAPE SHORELINE	5	DAYS
5)	INSTALL FILTER CLOTH AND LAY RIP-RAP	2	WEEKS
6)	REMOVE SILT FENCE, ESTABLISH PERENNIAL VEGITATIVE		
	COVER OVER ALL DISTURBED AREAS	2	DAYS

SSP 27 (993

Regulation of Specials Contact

PURPOSE: EROSION CONTROL DATUM: M.L.W. 0.00 ADJACENT PROPERTY OWNERS:

1) GRAY N. TURNER

2) DAVID H. ADAMS

GENERAL NOTES
AND
SEQUENCE OF EVENTS

PROPOSED SHORELINE PROTECTION

IN: LINKHORN BAY

AT: 1537 QUAIL POINT ROAD

CITY: VIRGINIA BEACH STATE: VIRGINIA

APPLICATION BY:

MARK A. BRUNER

SHEET 8 OF 9 DATE: 7/23/93

REVISED: 8/18/93

## SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA

	Total Lbs. Per Acre				
Minimum Care Lawn - Commercial or Residential - Kentucky 31 or Turf-Type Tall Fescue or	175-200 lbs.				
- Common Bermudagrass **	75 lbs.				
High-Maintenance Lawn - Kentucky 31 or Turf-Type Tall Fescue or	200-250 lbs.				
- Hybrid Bermudagrass (seed) **  or  Librid Bermudagrass (by other proceeding)	40 lbs. (unhulled) 30 lbs. (hulled)				
<ul> <li>Hybrid Bermudagrass (by other vegetative establishment method, see Std. &amp; Spec. 3.34)</li> </ul>					
General Slope (3:1 or less)  - Kentucky 31 Fescue  - Red Top Grass  - Seasonal Nurse Crop *  Low Maintenance Slope (Steeper than 3:1)  - Kentucky 31 Tall Fescue  - Common Bermudagrass **  - Red Top Grass	128 lbs. 2 lbs. 20 lbs. 150 lbs. 93-108 lbs. 0-15 lbs. 2 lbs.				
<ul> <li>Seasonal Nurse Crop *</li> <li>Sericea Lespedeza **</li> </ul>	20 lbs. <u>20 lbs.</u> 150 lbs.				
* Use seasonal nurse crop in accordance with seeding dates as stated below:  February, March through April					
** May through October, use hulled seed. All other seeding periods, use unhulled seed. Weeping Lovegrass may be added to any slope or low-maintenance mix during warmer seeding periods; add 10-20 lbs./acre in mixes.					

SEP 27 1993

SEEDING IN: LINKHORN BAY PURPOSE: EROSION CONTROL SCHEDULE AT: 1537 QUAIL POINT ROAD DATUM: M.L.W. 0.00 CITY: VIRGINIA BEACH ADJACENT PROPERTY OWNERS: STATE: VIRGINIA 1) GRAY N. TURNER APPLICATION BY: 2) DAVID H. ADAMS MARK A. BRUNER PROPOSED SHORELINE SHEET 9 OF 9 DATE: 7/23/93 PROTECTION REVISED: 8/18/93 EXHIBIT F

## PROJECT COMPLIANCE ASSESSMENT

			ENGINEER SITE VISIT DATE/TIME OTHERS PRESENT			
Permittee						
Location	(Waterway) (City/Coun	ity)				
	escription_			······································		
Project (	ompleted?					
Date of F	ermit Expir	ration	(VMRC (LWB)	)		
	imensions a					
Project [	Dimensions a	as Constr	ucted			
Can Perm	it Compliand	ce be Det	ermined.	?	If no,	explain.
	f Permit Con Compliance			Out of	Complian	ce
	al Comments					
	or?					
Pictures	Taken?	YES		NO		

3 6668 14111711 1